





## Original Correspondence.

## THE COPPER TRADE.

Sir.—Your correspondent, "Z," seems to be puzzled respecting the mode of finding the average standard of copper ore; but I think, if he will look minutely into your description, copied into the first paragraph of his own letter, he will perceive that the mistake which led him to the absurd standard in his own calculations was in himself; for instance, let him take the same produce, &c., and price, £1. 2s. 6d., and let  $x$  = the standard sought: then, according to rule, we have—

$$\begin{aligned} x &= \left( (\text{6s. 2s. 6d.}) \times \frac{100}{6\%} \right) + \left( (\text{2s. 15s.}) \times \frac{100}{6\%} \right) \\ \therefore x &= (\text{8s. 17s. 6d.}) \times (100 \div 6\%) \\ \therefore x &= (\text{8s. 17s. 6d.}) \times (160 \div 5\%) = 1837.19s. 3d. \text{ Ans.} \end{aligned}$$

Which is the true standard for that day. With regard to the per centage returned as the assay being the number of pounds of pure copper contained in 100 lbs. of ore, that is perfectly correct; but as pure copper, as well as the ore, is sold at 112 lbs. to the cwt., "Z." will be less liable to mistake if he consider it as the number of tons of pure copper contained in 100 tons of such ore, each ton containing 20 cwt. of 112 lbs. With regard to 21 cwt. of ore being sold, instead of 20 cwt., to the ton, that is an old custom from the earliest times, when copper ore in Cornwall was considered of very little value by the miners; and the loss attendant upon carelessly turning it over, and carrying from one place to another, was considered to be made up in this 5 per cent, or 1 cwt. on the ton extra, which now, I think, should be discontinued, as by the greater care manifested, and better mode of conveyance, the loss cannot be a tithe of the 5 per cent still claimed. Referring to Mr. Hill's statements: if "Z." will take the trouble to examine his letters, I think he will not want the help of any one else to enable him to understand the reason of the difference in those calculations from that of the smelters.

BRIAREUS.

Lostwithiel, Nov. 8.

## IRON MANUFACTURED FROM PEAT.

Sir.—I have read with considerable interest the articles which have from time to time appeared in your columns, on the subject of the employment of peat in the smelting of iron, which has, I believe, on several occasions, been attempted; and although in the process of charring, or compressing, certain valuable products have been acquired, yet, up to the present time, I have not heard that iron has ever been smelted from the raw ironstone, either in a calcined state or otherwise, although a sufficient heat with a moderate blast was applied by myself some 20 years since, in Ireland, in a sepulchre, and I obtained from second running one or two small castings. But I found, on the rudo plan adopted by me, that it would not answer either in a mercantile point of view, nor could the operation be carried out other than as a laboratory experiment. Professor Davy, of the Dublin Society's House, was furnished with the particulars, and specimens of the raw, compressed, and charred turf, and the results obtained, with a paper describing the process observed. That gentleman, I have every reason to believe, at that time directed his attention to the subject, but without arriving at any satisfactory conclusion.

My more particular object in now treating on the subject is to elicit, through the medium of your Journal, the extent to which the Irish Peat Company have progressed in their labours, and the ground work on which they calculate on successful results. It is to be borne in mind that at one time, not so many years since, 5, 6, and, indeed, 7 tons of coal, or more, were required in smelting a ton of pig-iron. The introduction of Neilson's patent of the hot-blast in itself created a complete revolution in the iron trade, and I have witnessed pig-iron of the best quality produced with 28 cwt. of coal, exclusive of that required for heating the air admitted to the furnace, which may be taken at 6 cwt. The low ebb at which the iron trade was at one time, when Scotch pigs might be had at 11. 15s. to 11. 17s. 6d. per ton, should also be taken into consideration, for although the present price quoted is 41. 10s. per ton, there is no certainty of this price holding; indeed, the many reverses and extreme quotations which have appeared at intervals in your Journal afford striking and convincing evidence. However, not to lose sight of the object more immediately before me, I would first enquire to what consistency they can bring their turf, so that it may come in contact with the blast, so as not to be reduced at once, but to burn away to the heart, as is the case with coke; while, when the turf is rendered so very compact, as far as my experience goes, the outer part is burnt away, and the core remains untouched; and moreover, it is not in itself sufficiently massive or compact to bear the "burden." I have no doubt, however, but that these objections have been and are well known to the patentees, and may have been obviated; but as your report, with the remarks applying to this company, are rather calculated to mislead than to render the matter comprehensive to the general reader, I should feel, for one, obliged if the patentees or agents of the company would condescend to enlighten me and the public generally on one or two points of vital interest.—London, Nov. 16. HIERO.

## PORT PHILIP AND COLONIAL GOLD COMPANY.

Sir.—I have the first official assurance that the London managers of this distant concern "hope to be soon enabled to call the proprietors together." There can be no doubt they are very anxious for that event. To men of high character and extensive repute it must be very painful to suffer under such mistrust and suspicion. It is only a week since the chairman was confounded with Mr. Pecksniff, or, at least, very distractingly compared to him; and as there is nothing in which I take greater pleasure than rescuing merit in any class from unjust obloquy, I shall gladly offer my mite of advice in this very trying position. I can well appreciate the feeling which leads honest men to persevere in well doing, through evil and through good report, and strong in the consciousness of integrity, disdain to feel or to repeat the dart of calumny, a trouble which only mean and scrupulous persons can be expected to take. Still, knowing as I explained in my last letter, the vast intrinsic value of the property which has been created, it must be very distressing to the chairman and the board to see its market value so depressed. And giving them all credit for the sensitiveness of highly conscientious minds, breeding great anxiety to avoid masking any mistaken reports to mislead the public, and preferring rather to await the return of Mr. Evan Hopkins, in whose word the public, they are aware, place even higher confidence than their own, that he may disclose the actual truth without any blunders; yet still I think they might, without any degradation to the dignity of injured innocence, take some preliminary steps. The watchful care to avoid losses by sale of the friends of the subscribers; the extreme caution in important points; the indefatigable experiments to obtain the very best managers, by making and cancelling successive appointments; the extent of their energetic operations, not confined to one colony; the zealous efforts, so well appreciated on the spot, to raise a good market value for the property, and the subsequent conscientious care to check a too speculative rise; the great individual respect their whole conduct has obtained for them, and the confidence and admiration which "London companies" are thereby enjoying with the colonists and the Government; all these agreeable facts they are untrue to themselves in withholding to the last moment, and unnecessarily so, because they may be read at once by the proprietary, without waiting for Mr. Evan Hopkins's return. It will be hardly possible for the shareholders to appreciate these meritorious records at a glance upon voluminous printed matter put into their hands in the room. The consequence must be an adjournment until the documents are perused and considered, and it will be hardly fair to keep innocence, however self-sacrificing, so long under the pangs of suspense. Modest merit is, I am aware, always backward; but let it take confidence, and eschew an overtired delicacy. I would not insist on having the general report immediately printed, because, as it contains the details of the simple and inexpensive plans proposed by Mr. Hopkins for operating under the leases when granted, some reserve on these points may be excused to the directorate. Not that I anticipate much danger in the disclosure of these plans; their success depends so much on judgment and economy in managing them in selected spots, that they might prove quite unavailing in the hands of incompetent persons—in fact, to any one but their author; and immediately they were put in practice they would be seen and known, and could be imitated by ability, provided proper spots were chosen.

Still, as Mr. Evan Hopkins has had for 10 months since he completed this report and delivered it no control over the mining operations, it may be as well to reserve his plan until he is restored to the use of them. His exertions have been made too much a common benefit already. Besides, this report contains no details on the invaluable services of the directors, which can only be gathered from it by implication and conjecture. But the despatches from Mr. Hopkins to the board, from the 9th of June, to the latest date, filled with communications of their acts, might, I think, with perfect propriety and safety, be printed at once. Let the directors take my advice in this respect, and take courage, and not shrink so much from doing themselves justice. I would also print at the same time the secret advice concealed from Mr. Hopkins, no doubt for very good reasons, from those persons in the colony who have had the funds and operations of the company in their sole control. And at the same time, the replies of the board to Mr. Hopkins's invaluable despatches, which have so strangely miscarried, that he has not had their receipt acknowledged to him even by the secretary. The directors will thus immediately place their conduct in a clear light, instead of continuing the lingering victims of surmise and ambiguity, so very painful to honourable men. It is never safe to take anything for granted. For instance, the general impression has been that Mr. Hopkins was the manager, the superintendent, the commander-in-chief, the director, "No. 1" (as he was styled by the chairman) of the Port Philip company. I confess I also took this for granted; so strongly was I impressed with the fact. I have often publicly asserted it, and without any contradiction; indeed, I stated in March last, that the control of such a concern "by Mr. Bland, or Mr. Sand, or any other nobody" (whom I never before heard of), "must be perfectly disastrous to its prospects," which depended solely on Mr. Evan Hopkins's conduct. So far from meeting contradiction, "A Shareholder" in your next Journal asserted the supremacy of the latter in the strongest terms, a mistake, it short, which seems to have been so generally shared, that I have never seen it publicly stated anywhere that Mr. Hopkins was only a subordinate, under the orders of a succession of other persons. The error has been so very prevalent, that several reports upon mining operations, published this year, have been implicitly believed to proceed from Mr. Hopkins, as "the superintendent," whereas, in fact, he

never wrote a word of them, Mr. Bland having been geologist, reporter, mine captain-in-chief, since the month of January. When Mr. Hopkins had delivered in his invaluable compendium of the resources of the colony, with full directions for future working as far as leases could be obtained, he was kindly relieved of this very arduous part of his labour, and his expanded and comprehensive energies confined to perfecting the melting establishment at Melbourne, in assaying and in teaching the art which he had so skilfully learnt out of the mass of all nations. Some Welsh boys have been his best assistants, for the board were unable to find fit persons in London to send out for this business, which, but for the company's poverty, would have been carried on monthly previously, on a smaller, but very profitable scale, at the three stations early secured by Mr. Hopkins with that view, amongst others, at the richest points of the diggings. He has done porters' work when porters' work was required of him, as the only means of saving the shareholders' money hindered from doing what he meant to do, he has done the next best thing that he could do, and sunk all personal feelings under insult and breach of faith, as a duty to the shareholders, realising, that if they were deserved as to this position, they should not be denied as to all others.

One word of murmur or complaint from him, publicly uttered in this country, would, he knew, ruin his confidence, and completed the "reporters'" game. By this noble disinterestedness and intense perseverance he has saved the property. He would not throw up his mission in disgust, after being sacked, and he would not obey orders to quit Port Philip. His inflexible determination has been to preserve harmony in all cost to himself, and make the concern go on in spite of itself, even to the length of suspending his intercourse with the Government, to preserve the jealous dignity of the mining captain-in-chief, the great unknown, from being ruffled. The printing of his advices would throw light on all these ambiguities, and enable the proprietors to clear up their ideas, both upon the fact whether they invested under the belief that Mr. Hopkins was chief superintendent, and whether they wish him to act in that capacity. I do not mean to say that directors of so much experience in gold mines may not have found persons very superior to him, and quite competent to supersede him, but surely they ought to do their researches justice by early acquainting the proprietors of their discovery of such valuable agents. In fact, they themselves seem to be suffering under some uncertainties, as from open communication might dispel. When advices were published in Nov. 1852, which raised the shares to a high premium, they appended the name of Evan Hopkins to the report. This would indicate they must have been in some degree themselves the victims to the popular delusion of Mr. Hopkins's superiority, because, though they knew at the time that they had placed the operations of the company in the hands of another person (superior to him, or course, in their opinion), yet as he was not known to the public they prudently did not give his name, but substituted Mr. Hopkins's name for his, just as they had substituted his management for Mr. Hopkins's. It is not likely a strange man would have raised shares to a high premium, and, therefore, handily anxious for the high standing of the concern, they put a face upon the matter which was very brilliant, though it was not true. I am sure a multitude of persons do not by any means give full credit to the kind and considerate attentions of the directorate. Suppose that in Nov. 1852, there were 20,000 shares of the company not paid up: this was a large slice of the proposed capital. Now, if by raising the shares to 47, funds were raised to pay up the subscription, this was a great advantage to the company. The concern got it 20,000, and the sellers pocketed 60,000, which we cannot consider more than a fair remuneration for an operation skilfully conducted by men of high character. We must always look to that; a man of high character is expected to make more by it than a man of low character. Then, again, if the shares of the company fell in value after this transfer, even in spite of the comprehensive mining report delivered in the interval, it was very kind and cordial for such sellers to buy back the shares when worth very little, that the concern might be once more blessed with the society of fortunate persons, whose good star had previously raised their value so high. I can assure the public that these meritorious exertions are duly appreciated in the colony, and have had a proportionate influence in conferring esteem and respect. For not only are the London papers read at Melbourne, but the actual facts being known there, people are qualified to admire any peculiar ability displayed in the art of describing and representing them. Directors who take the trouble to get up a company for the public benefit, and take the fag of managing it, under the groans of responsibility, are of course entitled to the lion's share of the remuneration, and I am sure the shareholders will not refuse it when they know how well it has been earned. Let the board trust the proprietors as the proprietors have trusted them: let the confidence be mutual. They have told us honestly (and I am most happy to give them credit for truth) that the gold office is going on; they assume, of course, that the value of such an office is as well known to others as to themselves, persons well acquainted with a business are the least likely to blow a trumpet about it. What would be the use of such a parade, it could do nothing but raise the price of shares. Respectable men averse to jobbing will not, of course, contribute to a useless rise. But it is really cruel to the shareholders to conceal from them that they have discovered Mr. Hopkins's superior; such important news ought not to be withheld. It may, perhaps, be a prudent step, and they have kept such merit strictly secret, lest it might be prevailed upon to desert the company by tempting offers. It is not every one, whatever his talent, who backs them up by self-denial. Mr. Hopkins will not have offered from men of real honour and wealth; but though his term of engagement ended the 5th of June, he declines them all until he has rendered his account to those who supposed they were trusting him with their money. The Government is extremely anxious to employ him in a survey, to discover new resources to alleviate the desperate distress which interested folly and philanthropic emigration is daily aggravating, but, true as ever to his trust, he declines it, except on the condition that the Port Philip Company shall have such a discovery granted on lease as he may select for them. He has seen all his selections hitherto betrayed, and worked over by the multitude, and that was not the object of his mission to the colony. But if there be a better man, let him be brought forth at once. Mr. Hopkins will not be jealous of superior merit, but the realist to acknowledge it.

The directors are told, in his second despatch, they have a splendid field before them, if the board has got the right man in hand to cultivate it. I am sure he will not hinder any evolution of genius. He has himself a deep stake, and wishes nothing but success and prosperity to all, and, therefore, it is his earnest exhortation to the shareholders of this company to enquire into their affairs without delay. The printed book I indicate will be the first step, and that without waiting for the dividend at the meeting, for if the gilding is laid on too thick outside, it may divert attention from the matter printed within, which is most essential to be read by all who desire permanent prosperity and continued dividends. The melting and assaying establishment was in August growing into such public importance, that the eyes of the Government, the banks, and all respectable merchants are upon it. It is a great boon to the colony, and being self-supporting, it is not likely that the "resident director," in the absence of advices and remittances from home, will be able to act any necessity for winding up the concern, as he was preparing to do under such compulsion in the month of April last, immediately that it was perfected. Mr. Hopkins proposed to watch for three months longer, and then leave in November by the overland mail, to do justice and to receive it. It is a long journey to take to communicate to the shareholders information which has been twelve months lying at home, but the step has been made necessary. It will not be very easy now in the interval to go wrong. The rapid voyages of the General Screw Navigation Company's vessels have done welcome service to the shareholders at least. A splendid property, present and potential, belongs to them, and it rests solely with themselves whether they shall possess it or not.

DAD MUSHET.

P.S.—I shall reply with pleasure to enquiries from legitimate shareholders. Nov. 22.

## PEEL RIVER LAND AND MINERAL COMPANY.

Sir.—As you truly stated, in your last week's Journal, the appointment of Count Strzelecki as managing director was a most excellent one. The Count is undoubtedly a first-rate man, and under his auspices the company have every assurance of success. The condemnation of this appointment, however, was not the only erroneous impression of "14s. Premium"; as he appeared to think the rise in the shares was a "rig" on the part of the directors, produced by false reports, and the present fall was the consequence of their "bearing" the shares. Nothing could be more erroneous than all this. The first report of the discovery of gold in the Peel River emanated spontaneously from the Commissioner of Crown Lands. His statements have been since confirmed by independent, unbiased travellers, by the Australian press—the *Sydney Empire*, the *Sydney Morning Herald*, the *Maitland Mercury*; by men of the highest character for integrity and geological science; by Mr. Hanley, Mr. Clarke, the great gold discoverer himself, Mr. Hargreaves; and now, finally, by Mr. Baker, the manager of the Cordillera Company. Mr. Baker states, he analysed eleven pans of earth, taken from different parts, and found each pan highly auriferous. Now, I ask you if it is possible to have a chain of evidence more complete. "14s. Premium," therefore, need not be alarmed. The present fall in price arises from the great pressure on the Money Market: when that is relieved the shares will be again at 14s. premium, and more too.

But I think I sustain the statement which you kindly inserted in your intellectual Journal, that never was a body of shareholders more inert and apathetic in their own affairs than the Australian Agricultural Company, when I inform you that a meeting, carefully convened by the directors for the appointment of a new governor to the company, of a body of shareholders consisting of at least one or two, or perhaps three thousand, only about fifty to a hundred attended; that, without a question being asked—whether the slightest discussion, Mr. Ravenshaw was elected at once, *ub silentia*. Whether he is a capable man or not for this important office, not one of the shareholders seem to care—for know they cannot. He is the choice of the directors, certainly, but there has been nothing so successful, able, or energetic in their management, that we, the shareholders, should place a blind confidence in them.—Piccadilly, Nov. 23.

A SHAREHOLDER.

## THE QUARTZ ROCK COMPANY OF MARIPOSA.

Sir.—I have seen in your valuable journal several complaints against the California gold companies, for delay in bringing quartz crushing to issue. Amongst this class the Quartz Rock Company is noticed, but I think the following facts will show this under-taking to be an exception.

Formed to work a portion of Colonel Fremont's estate, they found when they sent out their staff and machinery that they could not be put in possession of it, and of course had to look for another location. Not until March, 1853, did they find anything suitable, when they purchased a freehold estate at Maxwell's Creek, in which there are three veins running through the property, samples of which have been sent, and assayed by Johnson and Matthey, and gave respectively 1157, 557, and 357, per ton of quartz. Since March they have been engaged in erecting buildings and machinery capable of crushing from 50 to 80 tons of quartz per day. Their last despatches state they will be in work the first week in November, and the result will be sent off before Christmas. Thus in nine months there will be in operation, while others have been two years; and at a cost of under 20,000*s.*, while others have spent 50,000*s.* In their selection, as far as assay goes, they are entitled to praise: for on working the quartz gives only one-third of the lowest assay, deducting 50 per cent for expenses, that will leave 300 per cent. profit on the capital.

I have been a shareholder from the beginning, and have been observant of their progress, which I think is highly satisfactory to all embarked in this adventure. Mile-end-road, Nov. 22.

ALFRED TRUEMAN.

## KNOCKATRELLANE MINING COMPANY.

Sir.—I am a shareholder in this company, and in reply to the observations of a brother proprietor, I beg to state that the mine has not been in work more than about eight months, operations only having commenced in the spring of the present year. Whenever there has been anything to communicate, it has always appeared in the columns of your valuable Journal. The water-wheel has been quite sufficient to unwater the mine at its present shallow depth. The ground is very hard, and the labourers are not so efficient as Cornishmen, hence results cannot be so soon arrived at. Preparations are being made for fixing the engine, and from personal inspection I can say all is proceeding as satisfactorily as can be anticipated. All information can be obtained at the office, and I have always found the secretary willing to give this courteously to all shareholders who have taken the trouble to apply to him. Cornhill, Nov. 26.

## NORTHAMPTONSHIRE IRONSTONE SLAG.

Sir.—There being now several companies forming for smelting this ore on the spot, notwithstanding the high price of fuel and labour, and the destruction of the land, as in Staffordshire, by throwing the slag away, will you allow me to put the following questions to your readers and correspondents, in the hope that something may be elicited to induce some one in the business to come forward and assist me in practically proving what it is admitted I have statistically shown to be of so much national value, particularly at the present time, as there is an unlimited demand for sanitary pipes, and all underground building material, which the slag is so well calculated to supply in any form or shape, plain or ornamental.

1. Is it not fair to presume that in the manufacturing of every ton of pig-iron at least 1 ton of earthy material, commonly called slag, may be cast direct from the furnace in a liquid state, so as to partly fill an iron brick, or pipe mould, of any form or shape, which only requires to be pressed and gradually cooled to be fit for use?

2. Are there not many million tons annually thrown away?

3. Have not bricks or large lumps been made, or run into moulds, many years since, direct from the furnace; but being full of gases, as the air, when cold, greatly reduced in bulk, permits the atmospheric pressure to bear against the outer surface, were they not generally found to be cracked in cooling?

4. Will not my patented system of piercing and pressing the fluid slag, when in the vessel, remedy this, by giving vent to the confined air, rendering the whole mass more solid and uniform, and lessening the contraction and expansion of the parts at different heats when cooling?

5. And if so, is not the piercing and pressing a great improvement on the old system, as it not only lightens the article nearly one-half, but makes it much stronger; by thus manufacturing bricks, pipes, tiles, &c., in combination with pig-iron, a much better and cheaper article may be produced for the London market than by any other system, and the material which is now thrown away, at a great expense in labour and destruction of land, may be manufactured into articles of unlimited demand for all sanitary and building purposes, being particularly adapted for all underground and water-works, such as the banks of the Thames?

W. G. ELLIOTT.

Blisworth, Nov. 24.

## ON THE PRODUCTIVE CHARACTER OF THE MINES IN THE PERTH TOWAN DISTRICT.

Sir.—This highly mineralised tract of country is parallel to the greatest copper-bearing mines of the county. It is immediately opposite, and only about a mile distant from the Tresekerby and Wheal Busy run of mines, which have been very productive of both tin and copper ores at a comparatively shallow depth. These mines I hear are likely again to be set to work by a London company. Next comes, in a parallel direction, the Wheal Unity and Wood Mine, which have made immense riches for the amount of work done, then the St. Day United Mines, which have added their share of profits, and the Consols and United Givernap Mines, then Wheal Damsel, Treviskey and Barrer, and Tresavean. These mines, forming a continuous run, must have made altogether a clear profit of not less than from 4,000,000*s.* to 5,000,000*s.*, and are still some of them not half worked out. Adjacent to Porth Town are East Pool, North Pool, Wheal Seton, Tincroft, Wheal Basset, Wheal Buller, and the Carn Brea Mines, with several others worthy of remark—suffice it to say that such a proved mineral district is worthy of particular notice, as being one of the best in the kingdom for investment of capital. I will now say something of the mines nearer home. The Tywarnhale Mines, situate at Porth Town, in the parish of St. Agnes, have yielded immense quantities of ore, and are still considered by practical and experienced miners to be one of the best speculations now idle in the district. These mines, which ceased working about three years ago, were just then beginning to recover the immense outlay made by the adventurers in the purchase of a considerable quantity of new machinery, erections, and other heavy surface and underground work, which happened at a time when the standard for copper ores was remarkably low. The standard improved immediately these mines ceased working, which enabled the adventurers to realize a profit of several hundred pounds on the ones from the last two months' work. If the adventurers had had a little more perseverance, they would undoubtedly have continued working to profit for several years. These mines would pay well now with the present standard. Adjoining is Wheal Ellen, which has continued to pay dividends for the last 10 years from the ores raised above the adit level. Wheal Music and Wheal Charlotte, also adjoining, have enriched the capitalist, and made many a poor man a gentleman. South Wheal Ellen, also adjoining, has proved very productive for a mine only 30 fms. below the adit. This mine had a small engine erected, which continued to work about two years, during which period the

# THE MINING JOURNAL.

## Meetings of Mining Companies.

### GLAMORGAN AND CARDIFF COAL AND COKE COMPANY.

A special general meeting of shareholders was held at the company's offices, on the 19th inst., Capt. MARK HALFEN SWEENEY, R.N., in the chair.

The CHAIRMAN remarked that the object for which the meeting had been convened was one of vital importance to the interests of the shareholders. He regretted that there was not a more numerous attendance, as the directors were anxious for the most searching enquiry, and were desirous of affording the fullest information. Mr. Morrison, who had been appointed manager upon the resignation of Mr. Higgins, had been indefatigable in his exertions. He had made a complete examination of the property, and was in a condition to offer terms that must be of the utmost advantage to the shareholders.

A MINER.

### DUTIES OF UNDERGROUND CAPTAINS.

SIR.—The duties of underground captains are as various as it is possible to conceive, and entirely depends on the party they are employed under. If a captain should be fortunate enough to be employed by a party whose intentions are to carry out legitimate mining, his duty will be to go underground at least four times in the week, to inspect the different bargains and pitches, and to carefully observe any change of ground that may take place, and to watch the effects that such changes may have on the lode; also to contract with the men, and see that every man performs his duty in a proper manner. Every underground captain is not supposed to be capable of dialling and assaying, although a good miner in every other respect: this I consider the duties of one class of agents. There is another class of agents (underground captains), who are connected with parties whose sole aim is to job in shares, and to gull the public. Now, the duty of the agent in this respect will be to sit down every Tuesday morning, and write a "flaming" report, to send to London or elsewhere, having received a letter from the secretary, or, perhaps, one of the directors, a day or two before, gently hinting that, unless there is a good report this week, the shareholders would get out of heart. The poor captain while sitting down (perhaps smoking his pipe), thinking what he must say by way of report, and his having said last week that the mine was looking much the same, for a good reason, too, probably not having more than three or four men at work, but just at this important moment one of the men comes up from the mine, and states that "they have cut more water in the end-to-lay" highly mineralised and warm. "Famous, my boys; now I can write a report." He commences thus:—"I am most happy to inform you that we cut a stream of water-to-lay in the adit level, and it is so hot that it has taken off the skin from the men's feet and legs, and we are expecting every foot we drive to cut a course of ore; in fact, nothing can exceed the prospects in this level." On this report the London secretary goes to work, the shares go up, and matters proceed smoothly enough while the water continues warm.

There are also other underground captains, so situated that it is next to an impossibility to tell their duty; for if they order a "pare" of men to work in a certain place to-day, perhaps to-morrow he will have orders from the committee to stop that place, and put them somewhere else—consequently, instead of the captain having the management of the underground operations, it is as the committee wish: so that the duties of agents are to do just what will suit a few jobbers. So much for the duties of underground captains.—*Ecceter, Nov. 23.*

A MINER.

### [ADVERTISEMENT.]

### WHEAL SAMSON. 52

SIR.—As the individual who furnished the original report of the adjourned meeting of the above mine, on the 24th Oct., which you did me the favour to insert in your Journal of the 5th Inst., I cannot but feel surprised, with your correspondent, Mr. Braide, that such comments on it should have been made as those contained in an amended (?) report, which was published in the *Mining Journal* of the 12th Inst., certified to as official by the secretary, Mr. Crossman. The preamble is certainly most extraordinary, and a moment's reflection will convince you is aimed at the independence of the press, and would seem to preclude any reporters from your office (as the organ of the mining interest) from furnishing any report, unless sanctioned by the company, and unless their notes were submitted to the inspection of the officials—an ordeal which, if I mistake not your independent feelings as a journalist, you would never submit to.

The account with which I furnished you was not stated as of authority, but submitted as a fair and impartial abstract of the proceedings. I took no notes of the meeting, but committed the details to memory when I returned home on the evening of the day's meeting; and I am pleased to have an opportunity of saying, that one of the shareholders, who holds about one-fifth of the plurality of the votes, which Mr. Thomas stated would have been declared in his favour, said my report was the fairest that had ever appeared of the proceedings of Wheal Samson, and he hoped Mr. Thomas would not venture to reply to it. Mr. Thomas is, however, one of those cautious individuals who can never let well alone, and has brought down upon himself animadversion that he had better have avoided; for it is obvious to every one connected with Wheal Samson that the amended (?) report, though bearing the signature of the secretary, was written by himself; and one cannot sufficiently admire his characteristic modesty in eulogising his own "fair" statement of affairs; but he is not blessed with a very retentive memory, which unfortunately causes him frequently to forget the next day what he has previously stated; and if recommending Capt. Sparge to follow a course of working contrary to that gentleman's practised judgment—and which he complained of in no very measured terms in his letter of the 6th ult., that was read at the meeting—be not a censure, I know not what that term implies. But the fact is, Mr. Thomas entertains so high an opinion of his own practical mining knowledge, that he does not feel disposed to defer to those better qualified than himself, and therefore persists in continuing the upper east and west level, contrary to the avowed opinion of Capt. Sparge, and by so doing has subjected the concern to an useless expenditure of about 1000*l.*

I can hardly imagine that the directors had previously seen the preamble to the advertised report, as he has certainly given them occasion to say, "Defend us from our friends; we will help ourselves against our enemies." He states, that it is a fundamental rule of the company that all reports shall be authenticated by the signature of the party making them; and yet it is a positive fact, that the reports of Wheal Samson and the three other mines which are represented in the same offices, are hitherto given without any signature being attached to them—a practice which is not only complained of by the shareholders, but by many persons interested in mining, as being calculated to deter parties from taking shares in those undertakings.

How Mr. Thomas can say that the statement he made at the meeting differed materially from the condensed report which I furnished I cannot imagine. I am sure that "I notation extenuate or aught set down in malice." Not having taken notes of the proceedings at the meeting, which lasted about three hours, it was rather a difficult thing to give every word in detail; nor did I conceive it necessary to describe his portable diagram of two pens and a stick of sealing-wax, as illustrative of the present workings in the upper level, and the alterations he took upon himself to direct; but in other respects my report was a faithful one, and Mr. Thomas is ungenerous to call it otherwise. It is true he can accuse me of the fault of omission, but not of commission, as I purposely suppressed many observations which it would have been invidious to mention. But Mr. Thomas is not a grateful man.

I am satisfied that Wheal Samson, under proper management, will turn out a valuable investment; but it is indispensably necessary that there should be a resident captain, who should be sufficiently remunerated to devote the whole of his time to the necessary mining operations, and bring in every respect duly qualified to be wholly independent of any directions from Mr. Thomas; for it naturally happens that when an officer at the mine, in whom all confidence should be placed, and whose abilities justify that confidence, is conscious that he is constantly subject to an inferior restraint to which he should not be exposed, it neutralises his efforts, the contrary directions he receives being adverse to his own practical knowledge, so that the *modus operandi*, not being in accordance with his experience, is not carried on so effectively, or with that spirit which is indispensable to develop a mine to its fullest extent.

This will never be done so long as the directors place the reins of government in the hands of Mr. Thomas; and it was with this conscientious feeling, and from no personal motives, that I moved for his dismissal from the office of consulting agent—an office, for the reason I have given, wholly useless, and, I believe, unprecedented in any other mining company. Unfortunately for the proprietors of Wheal Samson, the directors are so connected with Mr. Thomas in the other mines with which he is interested that it would be inexpedient for them to part with him. I have great respect for them individually, as I believe them incapable of acting dishonestly; but they are committing a grievous error in confiding so much in Mr. Thomas's judgement; and though they allude to his prognostication of the other mines as corroborative of his knowledge, neither of those mines have yet been productive, but will continue to "drag their slow length along" whilst he is permitted to direct their proceedings. It was not my intention to have noticed Mr. Thomas's advertised report, as I am never at any time ambitious of seeing my name in print; but as I am called upon by Mr. Braide to avow myself the author of the original report, and I never write anything which I am ashamed to acknowledge, I am induced to take this step, and to add that the account of the proceedings which I furnished was substantially correct.—*London, Nov. 22.*

MATTHEW NOTTINGHAM.

SOUTH GARRAS MINE.—This sett is situated in the parish of Kenwyn, near Truro, immediately adjoining the Old Garras Mine, which, about forty years ago, was very rich for silver-lead. The company, although very recently constituted, and without being called on for a shilling, had the gratification of meeting this week, at the Red Lion Hotel, Truro, to congratulate each other on the discovery of a very rich lode of silver-lead, 4 feet wide, containing a vein of lead, 1½ feet wide, solid, on which they have driven 4 fathoms, and as they proceed the lode improves. The shares are now worth 50*l.* each, and it is supposed that by Saturday they will be worth 100*l.* each. The depth of the deposit from the surface is 12 fathoms. The meeting resolved to make a call of 1*l.* per share, and to proceed with the works with all possible despatch. It is hoped that this will make a mine equal to East Wheal Rose, and will doubtless be a good thing for the town of Truro, from which it is distant about two miles only.

THE GREAT TORBANEHILL MINERAL CASE.—We are happy to understand that another opportunity is about to be afforded for testing, before a legal tribunal, the true character of the Torbanehill mineral, especially in connection with the additional light derived from the recent investigations and opinions of the highest scientific and practical authorities in this country and on the continent. An application for a new trial, accordingly, came before the First Division of the Court of Session on Wednesday, when the first formal step was taken in the judicial procedure, which we understand, will be followed out without delay.—*Edinburgh Post.*

TUSSAUD'S EXHIBITION.—The second room, containing the Napoleon reliques, must be viewed with great interest by the visitors, more particularly the three carriages, which must bring to mind so many interesting memorials of bygone days—the carriage in which he made his Russian campaign, and which was taken by the Prussians after the Battle of Waterloo; the State Carriage, built for the occasion of his Coronation at Milan, in 1805, and the last used by Napoleon at St. Helena, and the last carriage he ever entered. This room contains numerous other reliques of this great soldier; and will occupy most pleasantly much time of the visitors, and with great profit also.

HOLLOWAY'S PILLS, FOR THE CURE OF BILIOUS AND LIVER COMPLAINTS.—Extract of a letter from Mr. J. D. Morgan, druggist, Tregaron, Cardiganshire, dated August 18, 1853.—"To Prof. Holloway.—Sir: Miss Mary Richards, residing in this place, suffered for many years with a liver complaint, which so debilitated her constitution as to render her incapable of following her usual avocations; having availed herself of numerous remedies, which produced no good effect, she was finally recommended to give your valuable pills a trial, from which she derived great benefit, and by steadily persevering with them for a short time they were the means of restoring her to the soundest health."—Sold by all druggists, and at Prof. Holloway's establishment, 244, Strand, London.

### Meetings of Mining Companies.

### GLAMORGAN AND CARDIFF COAL AND COKE COMPANY.

A special general meeting of shareholders was held at the company's offices, on the 19th inst., Capt. MARK HALFEN SWEENEY, R.N., in the chair.

The CHAIRMAN remarked that the object for which the meeting had been convened was one of vital importance to the interests of the shareholders. He regretted that there was not a more numerous attendance, as the directors were anxious for the most searching enquiry, and were desirous of affording the fullest information. Mr. Morrison, who had been appointed manager upon the resignation of Mr. Higgins, had been indefatigable in his exertions. He had made a complete examination of the property, and was in a condition to offer terms that must be of the utmost advantage to the shareholders.

Capt. Monroes read the report of Mr. Isaac Smith, the purser of the mine, and which states that at Treceastle the water was now out of the large engine-pit, and in less than a month's time the drift will commence to the 9 feet coal vein, and at about 30 yards from the place where they will begin the coal will be got. At 70 yards deep they get to the 6 ft. vein, the one now working in the drift. This is called the third seam, and is 5 ft. 11½ in. thick, a very good coal, and free from rubbish. The coke ovens (12 of them) will very soon be completed. The new branch of railway was in progress, and the forming will be finished in about six weeks for laying the rails. The engine for the large engine was completed, and a 70-horse power engine will be finished in a month's time. The claymills will be finished in a fortnight. It is intended for the making of fire-bricks, and the number that will be made quarterly is estimated at 500,000, at a profit of 30*l.* per 1000. At Llanharry they are now getting about 25 tons of coal daily; and in two months' time it will be in the great Grubb vein. When this shaft is in work, and the old one sunk to the same depth, they will get from 250 to 300 tons of coal daily. They have good common clay, and could make bricks for 15*l.* per 1000. The 12 coke ovens were at work, and they got as good coke from them as they get in England. There were 800 tons of coal on the surface, royalty paid, ready for coking. The report concludes by impressing on the directors the necessity of driving on faster, and completing all the work that has been commenced, so to speak, upon the spot, and furnish a proper report thereof, and personally attend, every monthly meeting, so to be enabled at once to answer any question in relation to the mines which may be required, and thus to form a kind of responsible connecting link between the shareholders and the works, and to see that their wishes are faithfully carried out; and by such means I doubt not but great good will result, and much expense be saved to the proprietors, and that satisfaction ensured which cannot be obtained by any other means, and which would be far outweighed by expense which would thus be incurred.

In having examined over every part of the workings, both underground and over, and having traversed through every adit and level, I can only say that I, as a shareholder, am more than satisfied of the legitimacy and *bona fide* nature of this adventure, and consider that we have to prepare ourselves, from all appearances, for a very lucrative undertaking; but I beg the shareholders not to be too anxious for returns, which would only defeat the ends in view, as it is well known to all persons acquainted with mining that with so small an outlay which has been expended in commencing the opening of these mines, nothing extraordinary must be expected at present; but with the judicious expenditure of capital in extending their development, and providing for dressing the ores when obtained, the most ample returns will ultimately be given; but considering the small outlay which has been made, I consider that under the circumstances you have ample value given, but a considerable further outlay must be made and patience exercised before you are able to reap the fruits of your labours, which are now fast ripening into maturity; and I cannot but congratulate the shareholders upon the valuable property which this adventure can scarcely fail at no very distant day to prove itself, and which I am strongly of opinion will yield the most ample returns for all the money and labour expended upon it.

I cannot conclude this report without alluding to a circumstance which strongly impressed itself on my mind when at the mines, and one which deeply concerns all interested in this undertaking—viz., in looking over the refuse matter as taken from the excavations, I was forcibly struck with its appearance, particularly the decomposed granite, of which there is a very large quantity, not only on the surface, but in the mines also, and from the sides of the excavations, in which I found it so soft as to be able to scrape it away with my hand, and thus removed several handfuls, and upon close examination with a powerful microscope, I am fully disposed to believe it to be auriferous; therefore I selected a quantity, and placed it in the charge of Capt. Ware, and shall be glad if you will consent that about one ton weight be delivered to me, together with some quicksilver, at your earliest convenience, and upon receipt of which I will undertake to pulverise and amalgamate it in one of my patented amalgamating machines, which will instantly test it, upon a practical working scale, whether it does or does not contain gold, and if so, the precise quantity per ton. I do not wish to raise expectations, for fear of disappointment; but from numerous other trials I have practically made, I am inclined to think that this material is really worth the trial which I will make, free of expense, upon receipt of the above.

In regard to a shareholder, Capt. Monroes said he had offers of 16*l.* per ton for the coke, which would yield a profit of about 8*l.* per ton. They were now getting about 25 tons of coal daily, but when the great vein was reached, which would be in about a month, they would get from 200 to 300 tons per day. He (Captain Morrison) was satisfied he was within the mark when he spoke of that quantity; it was the opinion of Mr. Smith they would get 500 tons daily. They had 12 coke ovens at present, but would, when their operations were fully developed, require at least a hundred ovens.

The CHAIRMAN remarked that, after the very able and lucid statement of their manager at the meeting, he thought, must see that everything had been done for the benefit of the shareholders that could possibly have been accomplished with such limited means. The propositions which the directors would have to submit were momentous questions; they were all very vital subjects, but he wished to assure the meeting that the directors had nothing to conceal; they desired to have no restriction or reservation, but to have the matter thoroughly investigated and fully discussed.

The SECRETARY having read the agenda, it was ultimately resolved that the further consideration of the various arrangements submitted be adjourned until the general meeting, which will take place early in December.—The meeting then separated.

### DEVON TIN MINES (DARTMOOR). 52

An adjourned meeting of shareholders was held at the offices of the company, No. 26, New Bridge-street, Blackfriars, on Tuesday, the 22d inst., Mr. JOSIAH HITCHINS in the chair,

To receive the reports directed to be obtained as to the position and prospects of the mines, and particularly in reference to the appliance of machinery to develop the tin ground now opened on.

As the subject appears of considerable importance, we publish the whole of the report of Mr. Samuel Perkes, C.E., as read by him to the meeting:—

In compliance with your instructions I visited the above mines on the 15th instant, with a view to examine into the general nature of the workings of the mines, and more particularly into the nature of the machinery at present employed, and its capability for converting the produce of your mines into a marketable state, and beg to lay before you the result of my investigations thereon. The sett is divided into two separate and distinct operations, and designated the North Mine and the South Mine, each of which I shall treat upon separately. The North Mine comprises one engine-shaft, which is now 15 fms. deep, and from which is driven, at 5 fms. in depth, one adit 44 fms. due east, and 20 fms. west; also a 15 fm. level driven east about 11 fms., and 10 fm. west; the whole on the course of the lode, which varies from 15 to 24 in. thick. In the bottom of the 5 fm. east there is a communication with the winze-shaft, which is now sunk 4 fms. below the 5 fm. level, making a total of 9 fms. in depth; this shaft ought, in my opinion, to be the main engine-shaft, and to form the centre of your future operations, as from all appearance it will doubtless intersect the slide at 25 fms. deep, and which runs north and south, consequently it intersects the east and west lodes at about right angles, and when this slide is intersected by the winze-shaft, as expected at the 25 fms., there is no doubt but very rich ore will be met with, as the appearance of the numerous lodes are extremely favourable, and what is already raised contains a considerable quantity of very fine tin, the poorest of which will yield about 1 ewt. of tin to every 100 sacks of ore, and each sack will weigh upon the average about 11*l.* cwt., but the average quality now being raised from the winze will yield about 2 to 2½ cwt. of tin to the 100 sacks, thus it will be seen that the quality is very rapidly improving, and from which I had stamped and washed when at the mines the sample which I now produce, and there is now at the surface about 500 sacks all ready for stamping, but which cannot be accomplished unless either the operations at the South Mine are suspended, or else more power provided, the latter of which I most strongly recommend. The power at the North Mine consists of one water-wheel, 20 ft. diameter, and about 3-ft. breast, which is fed by a leet cut along the slope of the hill about 190 fms. below the present engine and winze-shafts, and down each of which is placed a pump with 6-inch working barrels, and which are worked by means of chain-rods, communicating with and attached to the water-wheel, which is of sufficient power only to work the two pumps as at present existing, whose small dimensions cannot be supposed to be sufficient for the increased depth of shaft which will ultimately be required for the practical development of the vast mineral wealth which is plainly foreshadowed in every part of the excavations, and which evidently improve as they extend. Adjoining this water-wheel preparations are made for erecting six stamps' heads, and the turn-barrel for which is already erected; and at some 50 ft. below the water-wheel there is now prepared, and nearly completed, the dressing-floor. The whole of these arrangements are so far satisfactory, and will do excellently well for the purposes intended, provided there was sufficient power to work the stamps, which cannot be done unless the mining operations and pumping are suspended, which would be very injudicious to do. Therefore it will be necessary forthwith to prepare another wheel of sufficient power to work the pump, the winding-gear for the shafts, and the stamps for dressing the ore—say, a wheel not less than 50 ft. diameter, and 6-feet breast, and plant the same on the same spot as the 20-ft. wheel, which can be easily accomplished by lowering the wheel-pit 15 ft., and the whole of the present pumping gear, stamps, and winding gear, can be attached and worked at the same time, without any stoppage or hindrance to any portion thereof.

Whilst the change of wheel is being effected, the present winze-shaft can be stripped down at the upper part thereof to 9 ft. by 6 ft., and divided off by a common 3 ft. for the footway and pumps, and properly stay the same for the permanent main shaft, which can easily be effected, whilst at so shallow a depth as the bottom portion thereof is amply large enough for that purpose already, and down which will ultimately be required a 12-in. pump, instead of the 6-in. as at present. By this arrangement the standing expense of a horse and driver at the hoisting-wheel can be dispensed with, and the whole of the ore worked daily as they are raised from the mine. A small tramway will also be necessary to run the ores from the shaft to the stamps, which will be of very trifling expense, but which will save much labour and cartage. The 15 fm. level is at present within 15 fathoms from the winze-shaft, and the quantity of ore already in sight can be excavated and brought to surface at any time required, and which is of a quality that will well pay for working, although so near the surface.

The carpenter's shop and sawpit, just now completed, together with the smiths' shop, office, and store, are very serviceable buildings of their kinds, and will well answer their intended purpose; but some provision will be necessary to protect the banks from the inclemency of the weather, which is inconceivably severe in that district: some plain rough boarding will be sufficient, as a kind of rough shed, over the shaft, or else a common thatched roof. It will also be necessary for a couple of labourers to be employed for about two months or so in widening the upper end of the leet, in order to collect a little more water for the wheel, which, together with the wheel at the plantation, and which also is fed from the same leet, is not over and above well supplied, as either one or the other is frequently obliged to go short, hence they are not doing full duty.

The shafts, office, and store, are very serviceable buildings of their kinds, and will well answer their intended purpose; but some provision will be necessary to protect the banks from the inclemency of the weather, which is inconceivably severe in that district: some plain rough boarding will be sufficient, as a kind of rough shed, over the shaft, or else a common thatched roof. It will also be necessary for a couple of labourers to be employed for about two months or so in widening the upper end of the leet, in order to collect a little more water for the wheel, which, together with the wheel at the plantation, and which also is fed from the same leet, is not over and above well supplied, as either one or the other is frequently obliged to go short, hence they are not doing full duty.

Mr. BURSIS and Mr. WILLIAMS were elected on the committee of management.

A vote of thanks to the chairman and committee terminated the proceedings.

### LIGUANE AND GENERAL MINING COMPANY OF JAMAICA.

An extraordinary general meeting of shareholders was held at the company's offices on Monday, Mr. W. PRINCE in the chair.

The CHAIRMAN stated that the notice convening the meeting having been read, the CHAIRMAN stated that the first object which the directors had in view was the appointment of an efficient person to superintend the property in Jamaica. This step was strongly urged by Messrs. Atkinson and Co., who held a special power of attorney; but it was for the shareholders to come forward and enable the directors to carry the suggestion into effect, by subscribing sufficient funds for that purpose. It had been proposed, and shareholders present at their last meeting, holding upwards of 10,000 shares, had signed an agreement to raise the capital required by a subscription of 2*l.* per share, which would enable the directors to carry on the affairs of the company, and to test the River Head Mine, where, from certain indications, it was quite certain they had a promising lead. The shareholders, of course, had the option of subscribing to the proposed amount; the directors had no power to enforce it; but it was proposed that those who advanced the money should, if they felt so disposed, be allowed the opportunity of taking the unappropriated shares, of which there were 3140. Of the necessity of sending out a captain there could not be a question, as there was no one at present there to report upon the state of the property, or to keep the staff in proper discipline. He might remark that the directors had endeavoured to obtain from some of the scientific men who are on the island, such as Capt. Clements and Capt. Hitchins, but it was impossible to say with any certainty when such reports would arrive, or whether they would be forwarded

but how deep the metal was it was impossible to say. They had got the mine, but how it might turn out was very doubtful, although there were those who had a high opinion of it.

Mr. Bissoon was of opinion, after what the chairman had stated, that the shareholders ought to assist them to ascertain whether the property was worth anything or nothing; this might be done within a few months, and he thought it would be prudent to engage some competent person immediately to develop the mine. If it had been possible to have got a report, it would have been more satisfactory to the shareholders, as it would have been to the directors, who, it was evident, were doing the utmost in their power to serve the company, and the shareholders ought, therefore, to do the utmost in their power to serve and assist the directors. The statement of the chairman was that this mine was believed to be a good property, or that it would eventually become so. The shareholders, therefore, who subscribed the trifling sum proposed would, in the event of success, be benefited by becoming possessed of the unappropriated shares, to which those who did not subscribe would not be entitled.

Mr. Goding was of opinion that it was of the utmost importance the directors should ascertain whether a lead existed. He was a large proprietor, and should be serious loser if caution measures were not adopted. Why not request Captain Cleme to send a report?

The CHAIRMAN said he had understood that the Metcalfe Company had not the most implicit confidence in Capt. Cleme's report. The directors of the Liguanea Company had really no good cause yet to believe that any report of their late captain had been untrue; there was only a vague suspicion that he had not been correct, but that suspicion (the chairman) thought was removed, from the fact of Capt. Lean's statements having been corroborated by one of the directors.

Mr. Goding repeated that he had no confidence in the reports of Capt. Lean.

A SHAREHOLDER said the question was whether they should subscribe the 2s. ? If they did not, the mine must be abandoned, and other parties would, no doubt, be very glad to take it up.

The CHAIRMAN put the first resolution—That 2s. per share be subscribed, to enable the directors to carry on the affairs of the company, and to test the River Head Mine.—Carried unanimously.

The next question was as to the making certain bye-laws, rules, and regulations, for the management and government of the company, to compel the registration of unregistered shares or scrip, or to forfeit the same if not brought in for registration on or before the 1st January next.

A SHAREHOLDER enquired what the effect of the resolution would be, if carried?

The CHAIRMAN replied that scrip shares would be all lost. The opinion of the meeting was in favour of the resolution, which was carried unanimously.—A unanimous vote of thanks to the chairman and directors terminated the proceedings.

#### THE OBERNHOF MINING COMPANY.

A general meeting of the shareholders was held at the offices of the company, 50, Threadneedle-street, on Thursday, for the purpose of presenting the financial statement, the reports of the mines and surface constructions, and to consider the propriety of increasing the capital by the issue of some of the reserved shares.

Mr. J. BROWNE in the chair.

The CHAIRMAN in opening the business said, this was not a regular meeting of the company, but convened for the purpose of giving explanations as to the state and prospects of the property. The meeting, under ordinary circumstances, would have been held either to declare or not a dividend; although they had met for a special purpose, that which would interest them most was the working cost and proceeds of the mine for the last three months, ending September; during that time they had realised profits, over working costs, amounting to £144,10s.; thus far, the expectations originally held out that the ores would exceed the working cost had been truly verified. The first three months' accounts were made under circumstances of great disadvantage to the last: the sale of ore left by the old company being included, in addition to imperfect workings, about six weeks above the quarter; these went to swell the profit of the first three months; but, notwithstanding these advantages, the last three months' profit exceeded the former. They might say it would be a very simple matter to declare a dividend from that amount, and so it would have been if they had received the products, but impediments had been met with which it was impossible to foresee: the navigation of the River Lahn had been suspended in consequence of the canalisation of part of it, which had prevented them sending a single ounce of the ore to market. But those improvements being now completed, he had received a letter from Mr. Ober, informing him that a large proportion had been already sent to the smelters, and that the remainder would be forwarded immediately. They must perceive that if they had received the value of their products, they would have been in a position to pay a dividend. The next question was, the condition of the mine—whether the present state of things was likely to be permanent, or any chance of further improvement. He had the opinion of eminent Cornish miners that they had a most valuable property, but would read one of a series of letters received from Capt. Linton, all of the most favourable character.

The CHAIRMAN then read the following letter:

*Oberhof, Nov. 16.—In the west end in the Lahn gallery the lode is 12 in. wide, producing 12 cts. of copper ore per fm. In a cross-cut from the eastern end of the Lahn gallery we have cut the White Rock lode, 18 in. wide, producing one ton of lead per fm. In a slope in the back of this gallery, west of the ladder-road winze, the lode is 12 in. wide, the lode is 18 in. wide, producing 2 tons of lead per fm. We cannot sink the No. 1 winze in the Usine gallery, in consequence of the quantity of water, but in two or three days we shall have a small lift of pumps, and draw it out, as we have a good course of lead in the bottom, which still continues to improve in depth. In the No. 2 winze, sinking in the bottom of this gallery, the lode is 12 in. wide, producing 12 cts. of copper per fm. In the No. 3 winze, sinking in the bottom of this gallery, the lode is 12 inches wide, producing 1½ tons of lead per fm. In a slope at the back of this gallery, in the White Rock lode, west of the ladder-road winze, the lode is 3 feet wide, producing 2 tons of lead per fm. In a slope on the Demure lode, to the south of this, the lode is 12 inches wide, producing 1½ tons of lead per fm. In a winze in the bottom of the Schleife gallery the lode is 10 inches wide, producing 10 cts. of lead per fm., in No. 1 slope, at the bottom of this gallery, the lode is 3 ft. wide, producing 1½ ton of ore per fm.; in No. 2 slope, in the bottom of this level, the lode is 3 ft. wide, producing 4 tons of lead per fm.; in No. 3 slope, in the bottom of this level, the lode is 15 in. wide, producing 1 ton per fm. In a slope in the back of the Middle gallery, west of the ladder-road winze, the lode is 3 ft. wide, producing 2 tons of lead per fm. In a slope in the back of the ladder-road winze the lode is 20 in. wide, producing 1½ ton of lead per fm. Driving west in the Highway gallery, the lode is 12 in. wide, producing 1½ ton of lead per fm. Our prospects in the mine are looking well. With respect to the Vindon Mine, Capt. W. Linton writes—“In the deep gallery a winze sunk to the depth of 10 ft. I hope in the course of a month to cut the lode. In No. 3 slope, in this gallery, the lode is 12 in. wide, producing 1 ton of lead per fm.; in No. 5 lode, in a slope in the back of this gallery, the lode is 3 ft. wide, producing 2 tons of lead per fm.; in a slope in the bottom of this gallery the lode is 2 feet wide, producing 1 ton of lead per fm. The new gallery is progressing satisfactorily.” P.S. I have not stated the number of tons of blend in my report, but it is well worth our attention, as we can raise upwards of 200 tons per month. Mr. Ober is making 37 per ton, and I hope in a short time to do better.”*

The CHAIRMAN continued: They had not discovered a course of ore producing a few hundred tons, but many thousands, and with the disadvantage of only one place of exit, preventing them making the mine perform what they could wish, but the way the working had been extended would be seen by the number of wagons employed. In April, the number was 414; May, 450; June, 630; July, 685; August, 757; and Sept., 1085. It might be said this was no criterion; the quantity might be increased, but the quality decreased; but he was glad to inform them that, whilst the quantity increased the quality improved, rendering their surface works wholly inadequate to produce underground, and compelling them only to dress the best ores. They were at the present time *de facto* producing more than double the amount than at the commencement. When he first met them, he told them they started with about 5000 tons of ore; upon the last occasion he thought it would be doubled. He had no hesitation in now telling them it would be increased five or even tenfold that amount, and if they consulted the reports they must arrive at the same conclusion. One discovery alone since they last met was 4000 tons of ore, worth 4t. per fm., which would be got to surface at an expense of about 6s. per fm. These discoveries proved the importance of having commensurate surface establishments; but whatever measures they adopted would not in the slightest degree impede the existing workings. They had obtained their profits from the old establishment; the new ones would be erected without interfering with them, and would, in fact, become subsidiary to the new. When they first took the concern, they thought that 2000t. or 3000t. would have been sufficient to patch up the old buildings; but when they made such large discoveries, he saw that would be useless; and in his discretion, which he trusted he had used for the benefit of the shareholders, he had determined to have one large concern, but the quality decreased; but he was glad to inform them that, whilst the quantity increased the quality improved, rendering their surface works wholly inadequate to produce underground, and compelling them only to dress the best ores. They were at the present time *de facto* producing more than double the amount than at the commencement. When he first met them, he told them they started with about 5000 tons of ore; upon the last occasion he thought it would be doubled. He had no

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**CALSTOCK UNITED.**—The lode in the 20, east of Varnish's, is 3 feet wide, producing mudi and flockan, but very little copper to estimate. The ground in Varnish's engine-shaft is favourable, and the men making good progress in sinking. The pitwork is in working order. The mudi pitches about Hancock's shaft are very productive; the miners are getting fair wages at from 5s. to 5s. 6d. per ton. We are extending the tramroad west of this shaft, with a view to set other pitches in the places where we have cut through the lode in the side of the adit westward. We are dressing some copper ore from those places of low produce. We expect to draw tinstuff from the 42 fm. level, at Caroline's shaft, on Thursday next, and to put the stamps to work the following week. The lode in Caroline's 42 east is larger than last reported, and the ground more favourable for driving.—JOHN KERNICK ; W. COOK : Nov. 21.

**CARADON WOOD.**—During the past month the 43 has been driven north on the main adit 4 fms., 3 ft. 1 in., and driven 6 feet west across the lode, and in driving in this direction we have discovered a little lead, but have not yet driven through the lode. The eastern lode has been driven south 3 fms. 5 ft. 9 in.; it is about 2 ft. wide, spangled with lead, but hardly enough to save; in the same level north the lode has been driven on 4 fms., the lode is about 5 ft. wide, composed of spar, prian, and mudi. Our lodes are looking better at this time than I have ever seen them look before in this level.—JOHN HORSWILL : Nov. 22.

**CLIVE.**—The deep adit level is still in sediment, and is likely to continue so for some distance. The stopes in the back of the adit level is producing work of a moderate quality. At the patch we are stopping the bottom of the open cut, and getting on as fast as circumstances will allow.—Samarren's Shaft : The 8 fm. level has been driven on the coarse part of the lode, and in opening on the north side of the level we have cut a branch 18 in. wide—a mixture of clay, limestone, barytes, and good stones of ore. From the present appearance this will be a profitable piece of ground when properly laid open; we have therefore commenced cutting a small plat in this level, and expect in about a fortnight to commence stowing in this part of the mine.—E. ROGERS : Nov. 21.

**CLOWNAGE WOOD.**—We have hoisted Slater's shaft, and shall resume the adit west at once, where the lode is 1½ to 2 ft. wide, composed of jack, quartz, spots of ore, driving at 3s. per fm. The adit, east of Jenkins' son's lode, is 1 ft. wide, composed of gossan, quartz, and mudi.—J. DELVERESE ; E. CHIKOWI : Nov. 22.

**COMB MARTIN CONSOLS.**—The adit level, towards the engine-shaft, is driven 41 fms., and we have 12 fms. further to drive to communicate with the engine-shaft. I hope to intersect the capel in the adit level in a day or two; I have every reason to believe that we are now near it, as there is so much water issuing from the present end. After the capel is intersected in the adit level, and the engine-shaft drained, I shall immediately commence sinking with all possible speed. The bob-bit, by the engine-shaft, is taken out, in order that the masons may commence building the walls. The carpenter on the mine is preparing the whin with all speed; the carpenters engage building the water-wheel are making rapid progress. All other proceedings are going on well.—J. TAKEWEEK : Nov. 22.

**CRETTOWN.**—The engine-shaft is sunk below the 12 fm. level 14 fms., the lode is from 6 in. to 1 ft. wide, with spots of copper, lead, and jack; I have set now to drive at this level east and west on the course of the lode, hoping to see the lode improve shortly in driving. In the 12 west the lode is 3 ft. wide, with a branch on the south wall mixed with copper. In the 12 east there is a small flockan about 6 in. wide, but unproductive at present. The stopes in back of the 12 west are not looking quite so well as they were.—M. WOODCOCK : Nov. 22.

**CROW HILL (St. STEPHENS).**—The agent reports: We have met with the lead ground in the 22 fm. level west some fathoms before we expected it, from which we have reason to hope it is lengthening in going down. The western shaft is holed to the 15. The plunger-lift is fixed, and the sumpum will begin to sink next week. The new crusher works well, as does the burning-house. We purpose sampling about 20 tons on the 2 Dec., after which the lead will be dressed and weighed every month.

**CUBERT UNITED.**—The lode in the engine-shaft still produces stones of lead. The lode in the back of the 45 west is producing saving work; the lode to the east in this level is without important alteration. The lode in the 35 west is not so rich for lead as stated in our last, but is still producing good stones of lead; the lode in this level east has improved during the past week. The lode in the 25 west is still producing a little lead; the lode in the bottom of this level east maintains its size and character. The lode in the back of the 15 west produces 8 cwt.s. of lead per fathom. Trebellen shaftmen have resumed sinking, but have taken down no lode as yet. The lode in the 45 north and south is much the same as stated in our last.—J. TAKEW : AURHUR DOWNS : Nov. 23.

**CWM DARREN.**—The pay-day was on Saturday last. The engine-shaft is set to six men for the month, at 15s. per fathom, now down 8 fms. 9 ft. 10 in. below the 20. The lode for the last 3 ft. in sinking has improved, being in the west end of the shaft a good mixture of silver-lead ore for 13 or 16 inches wide, which appears to be dipping east; the ground is not quite so easy for sinking, but the stratum appears more congenial for ore than for the last 7 or 8 fms. in sinking. The lode in the 20 west is a good mixture of copper ore for 3 ft. wide, yielding at present about 1 ton per fathom. The term of our tribute pitch does not expire previous to our next setting-day, but their prospects are also a little improved. Our crushing-mill is now in a good state of repair, and the tributes are getting on with the dressing. The cost for the last month, exclusive of merchants' bills, is only 53s. 10s. 5d.

**DREWSTEIGTON.**—Since my last we have cleared the adit level to the extent of 18 fms.; clearing this adit level has enabled us to intersect two large lodes—No. 1 being 4 feet wide, running south-east and north-west, this lode is composed of beautiful flint-spar and prian, with a leader of flockan on the footwall, 1½ ft. wide, producing some good specimens of lead. No. 2 being 5 ft. wide, running nearly east and west; its component parts are gossan, with mudi and black jack, spotted with yellow copper ore. Judging from the present appearance, there is every reason to believe that we shall find these lodes productive for minerals at a shallow depth.—T. GIDLEY : Nov. 22.

**DUNSLY WHEAL PHENIX.**—We have a great improvement in the lode in the shaft sinking in the eastern adit; the lode is 2 ft. wide, and I was surprised to find it was nearly half tin. We have also occasionally very rich stones of copper ore.

**EAST EOSORN.**—The cross-cut driving east continues much the same, and the ground appears favourable. The men will complete the foundation for the smiths and carpenters' shops, together with the count-house; and after that will proceed to take out the foundation for the engine and boiler-house. I am to have the stamp to stamp our tinstuff in a fortnight's time.—T. CARTWRIGHT : Nov. 21.

**EAST WHEAL RUSSELL.**—In the 55 we have a kindy lode, producing good stones of ore. The 45, driving east, is just the same as last reported. The pitch in the back of the level is just as last reported.—W. MATHERELL.

**EAST WHITE GRIT.**—The deep level is now secured, and I have set the men, per contract for 50f., to drive 3 fathoms; also to finish sinking the shaft to the deep level 1 fm. 1 ft., and to cut a plat. The winch is now down from the 29 fm. level is continued, with a fine branch of ore going down.—R. P. EDLSTEN : Nov. 23.

**EAST VEOLAND CONSOLS.**—We have driven the cross-cut in the north adit level 6 fms. south; we have cut several branches, and discovered a lode 9 in. wide, producing good tin work; it is the same south lode as lately found in Veoland, and I expect every fathom it will become larger. We are now driving west on the main lode; the end is now carrying 3 ft. of the lode, and produces good tin work, price of driving 2s. per fm. The south adit level is driven by the side of the lode, and produces stones of peach, rick for tin, price for driving 17s. 8s. per fm. We shall cut into the lode after driving further west.—W. FLOVY : Nov. 22.

**EGSGATE WHEAL LILEE.**—There is no alteration to notice in any of the levels since last week. The winches on both the counter lode and south lode are much the same. The stops are producing a fair quantity of stuff. The engine-shaft was divided and the footway completed by the 12th inst.; since that time there has been nothing done in the 30 fm. level. Our pumping-wheel will not keep the water. We are about to bring in another small stream of water from the south part of the sett, which we hope will enable us to keep the water much better than of late. The frost is already set in, and if it lasts many days longer will considerably retard our dressing operations. Should it not do so, I think we shall be able to sample somewhere about the 15th or 20th Dec.—JOHN LEAN : Nov. 18.

**EXMOOR WHEAL ELIZA.**—Being in want of men, we have thought it better to suspend the cross-cut in the 36 fathom level, and drive the 30 west; we have driven through the lode in this place, and have now a hole 6 in. wide, composed of flockan and prian; the end is letting out water. In the 50 cross-cut north we have driven through a lode of mudi and quartz, 2 ft. wide, and have again met with capel; this is most extraordinary. We have now intersected branches or lodes in sizes from 6 in. to 5 ft. wide, but they are so near each other that, properly speaking, they are but one lode, which is now seen 5 fms. wide, and we are not through it yet. I would therefore recommend to continue the cross-cut north till we do get through it, or at least till we open on more favourable ground for driving both east and west.

**GORN LEAD.**—We have a very strong lode in the adit end, of a promising appearance, and of the same nature as in the upper workings, west of the little western shaft, a leader of spar, with spots of ore, &c. I hope we shall soon get in settled ground, and have a good lode, as we have kindly ground before us; the lode is 6 ft. 6 in. wide; the part of the lode we have in Price's shaft is 6 ft. wide, very kindly; in going down the lode is getting stronger. If we could get down, and cut through the lode, there is hope of having a good one, as the ore is generally in the north part, but we are overwet with water, and we cannot do anything in going down without machinery to pump it out. In Turner's cross-cut we have not cut the lode, as I expected we should, owing to the lode having taken a heavy in the adit end, and thrown it further south from the cross-cut, the water coming strongly from the present end. In Deline's cross-cut the ground continues just the same as last reported; this week I put two adit men there.—R. MATTHIAS : Nov. 19.

**GAWTON UNITED.**—H. R. H.'s engine-shaft is sunk 11 fms. 4 ft. below the 10 fm. level, the ground being killas, at present more favourable than we have had since the commencement of sinking: on last setting-day it was let to six men, stented 4 fms. certain, including all necessary work, per bargain of 60f., and it is the intention (without contrary orders) to drive in the 24 fm. level, and intersect the lode, when, judging from appearances above, we shall find them productive. A winze has been sunk in the bottom of the 10 fm. level, east of Bayly's shaft, 2 fms. 3 ft. 0 in., the lode in which, a few feet down, was productive for copper; in the bottom, however, it is disordered by a floor of capel, producing stones of ore only; this, added to the water being quick, it was thought advisable to suspend until the next level is extended under. The 10 fm. level has been driven 2 fms. 2 ft. 6 in., the lode in the end is about 15 in. wide, but poor; this, too, is suspended until a trial is given in the next level. A winze has been sunk from the adit to the 10 fm. level 3 fms., for ventilation of Bayly's shaft, footway. The deep adit level has been cut down, and the tram-road laid to the eastern cross-cut 20 fms., and the level extended south 2 fms. 3 ft. 0 in., for the purpose of intersecting the lode, which at this point is bare; it has not yet, however, been met with; the cross-cut in this end is 2 ft. wide—spar, mudi, and spots of ore, presenting a favourable appearance; the level north is driven 2 fms., in which the cross-course is 14 in. wide—flockan and mudi. Fuller's shaft is down about 20 fms. from surface, but in consequence of an increase of water has been suspended; we are now riding against it from the adit; we do not, however, expect to find much mineral until this shaft is holed and sunk below the deep level, which will take some time longer to accomplish. Torkington's shaft has been cleared up, and stuck on the course of the lode 3 fms. 3 ft., and the perpendicular shaft sunk 5 fms. 2 ft. 6 in., but to sink any deeper throughout the winter without machinery would be a great expense, and but little progress made; it was, therefore, thought advisable to cut down the adit level east of Sims's shaft, put in tramroad, and cut through the cross-course, to intersect the lode on the eastern side; this has been done, the distance being 23 fms., and the lode driven on about 2 fms. In the present end the lode is composed of branches of beautiful soft spar, peach, mudi, black, grey, and yellow, ore, presenting very favourable indications, in an excellent channel of white killas ground. As we are not yet clear of the cross-course, which appears to have carried the lode with it, as yet, the chances of success are very good. Looking at the present appearance of the lode, which undoubtedly will become larger, and improve gen-

rally, as there are 43 fms. more to drive to get into the fine lode we had at Torkington's. About 17 fms. north another lode has been sunk on 3 fms. 1 ft. 6 in., presenting a favourable appearance, very similar to that at Torkington's; it is about 3 feet wide, fully warranting an outlay, and in the event of the lode in the adit being found productive in the driving before alluded to, a cross-cut might be put out, and this lode also cut at a depth of 20 fms., which would be a sufficient trial for ascertaining the worth or otherwise of erecting machinery for an increased depth. There are, therefore, four important points in progress:—1. The cutting of the lodes from Bayly's shaft. 2. The communication of Fuller's shaft to the adit. 3. The intersection of the lode in the top adit level east of the cross-course. 4. The proving of Torkington's lode in the adit level; all of which will be pushed on as fast as possible, and with every prospect of success in the accomplishment. The mines at surface and underground are in a good state of repair and working order, and our cost for the next three months may be safely estimated within 440f.—J. BRAY ; H. H. HORSWILL : Nov. 17.

Bayly's shaft continues in favourable ground; in the cross-cut south no lode is yet met with. In the north cross-cut we have intersected a branch about 8 inches in width, composed of peach and mudi, underlying north: but I do not think of it. In the adit, east of Sims's shaft, we have another cross-course, or a limb of the first, which we have driven through; consequently, there is no lode in the end, and are driving south to this point.—H. H. HORSWILL : Nov. 22.

**GREAT CAMBRIAN MINING AND QUARRYING COMPANY.**—The manager's report to the board this week states, that he went to the mines on Thursday, and that the work is progressing most rapidly, and the lodes improving, particularly the No. 3 ledge, near the river, which is turning out some very good ore, &c.; the vein is 4 ft. thick. The sink on this lode is finished, and they will now begin to stop down the end, &c. He was going again on Monday, to meet some masons, who are to take the contract for building the wheel-pit, and would also measure up all the work done this month, and relet the bargains, so that he might send the particulars by Tuesday's post. In addition to this, the engineers, Messrs. Thomas and De Winton, in their letter, say, that in consequence of the great scarcity of engineers, they fear they shall not be able to erect the machinery on the ground until the middle of next month, by which time they hope to have all the machinery ready for crushing and dressing.

**GREAT HEWAS UNITED.**—We have fixed the second plunger-lift, which is working well, we shall now ease and divide the shaft, &c., and shall then be in good order for sinking to deeper levels; it was at this level where the last workers cut a large stream of water coming from the eastern ground a few days before they ceased working, which prevented the pitwork being taken up; this increase of water has occasioned us some difficulties to contend with in fixing this plunger-lift, and taking the water into the cistern in that level. The 36 fm. level is cleared from Northey's shaft to the engine-shaft, and would also measure up all the work done this month, and relet the bargains, so that he might send the particulars by Tuesday's post. In addition to this, the engineers, Messrs. Thomas and De Winton, in their letter, say, that in consequence of the great scarcity of engineers, they fear they shall not be able to erect the machinery on the ground until the middle of next month, by which time they hope to have all the machinery ready for crushing and dressing.

**GREAT TREGUEN CONSOLS.**—The lode in the 40 fm. level, east from Burgen's, is 1 ft. wide, producing some good work for lead; this level has not been communicated to the new shaft yet, but we expect to do so daily. The lode in the 30, east from new shaft, is 1½ ft. wide, turning out a little lead, and appears to be improving. The lode in the 20 east is 6 in. wide, with good stones of lead. The new shaft is got down to water, consequently we shall not be able to sink further under the 40. The stopes at the bottom of the 30 are looking well. We expect to sample on Saturday next about 30 tons of lead ore.—J. WEBB : Nov. 21.

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**GREAT WHEAL CANNING.**—The lode in the 40 fm. level, east from Burgen's, is 1 ft. wide, producing some good work for lead; this level has not been communicated to the new shaft yet, but we expect to do so daily. The lode in the 30, east from new shaft, is 1½ ft. wide, turning out a little lead, and appears to be improving. The lode in the 20 east is 6 in. wide, with good stones of lead. The new shaft is got down to water, consequently we shall not be able to sink further under the 40. The stopes at the bottom of the 30 are looking well. We expect to sample on Saturday next about 30 tons of lead ore.—J. WEBB : Nov. 21.

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**GREAT WHEAL CANNING.**—The lode in the 40 fm.



## The Mining Market; Prices of Metals, Ores, &amp;c.

METAL MARKET, London, November 25, 1853.

ENGLISH IRON.		per Ton.	SPELTER.
Bar and bolt	s.	20 0 0	On the spot p. ton £ — 22 0 0
In Wales	s.	— 8 0 0	To arrive " — 22 0 0
In Liverpool	s.	— 8 10 0	COPPER.
In Staffordshire	s.	— 9 10 0	Tile, 14 to 25 lbs. a p. ton 126 0 0
Sheets, single	s.	— 11 10 0	Tough cake " 126 0 0
" double	s.	— 13 0 0	Sheathing and bolts a .p. lb. 0 1 2
" Hoop	s.	— 10 15 0	Sheet " 0 1 2
" Rod, round	s.	— 10 0 0	Bottoms " 0 1 3
Nail rod, square	s.	— 9 10 0	Old " 0 1 3
Balls (Wales) b.	s.	— 8 0 0	Yellow Metal " 0 1 0
" (Staffordshire) b.	s.	— 8 5 0	Wetterstedt's Pat. Met. cwt. 2 0 0
Railway Chairs, Clyde b.	s.	— 5 17 6	ENGLISH LEAD.
Fig. No. 1, Clyde b.	s.	— 4 1 0	Pig p. ton 23 0 0
3-dhs. No. 1 & 2-dhs. No.	s.	— 4 1 0	Sheet " 24 0 0
No. 1, in Wales c.	s.	— 4 10 0	FOREIGN LEAD.
Scotch Fig. No. 1 in London	s.	— 4 10 0	Spanish, in bond p. ton 22 0 0
Stirling's Non-laminating, or Hardened,	s.	— 9 0 0 9 2 0	ENGLISH TIN.
Surface Rails	s.	— 9 0 0	Block p. cwt. — 6 2 0
Cold-blast, No. 1 Foundry	s.	5 10 0 6 10 0	Ingots " — — —
Charcoal Patent	s.	— 14 10 0	Bar " — 6 3 0
Tonghenech Pigs	s.	— 3 12 6	Refined " — — —
Ditto	s.	Wales 4 0 0 4 5 0	FOREIGN TIN.
FOREIGN IRON.	s.	— 11 10 0	Banca p. cwt. 5 18 0
Swedish	s.	— 17 0 0	Straits (uncertified) " 5 15 0
Russian CCND	s.	— 6 0 0	TIN-PLATES.
India Charcoal Pigs	s.	in London	b. IX Ditto — 1 11 0
IX Ditto	s.	Wales	IX Ditto — 1 17 6
FOREIGN STEEL.	s.	— 16 0 0	IC Coke " 1 6 0
Swedish keg, nominal	s.	— — —	IX Ditto — 1 12 6
Ditto faggio	s.	— — —	Canada plates a. ton — 13 0 0
HINC.	s.	— — —	QUICKSILVER f. — p. lb. — 0 2 4
In sheets d.	s.	p. ton 30 0 0	TERMS.— $\frac{1}{2}$ per cent. dis.; b. net; c. 3 dits; d. $\frac{1}{2}$ per cent. dis.; e. 2 ditto;
Terms.— $\frac{1}{2}$ ditto; deliv. in Liverpool 10s. per ton less. — Discount 5 per cent.	s.	f. 1 $\frac{1}{2}$ ditto; delivered in Liverpool 10s. per ton less.	

A reduction of the French duties on iron, as stated in the circular of the 10th inst., has at last been officially published, and this has confirmed the sound position of the iron trade. It is further understood that this reduction is only a prelude to much more liberal tariff.

Rails are much firmer; but few of the makers are disposed to sell at present rates. Scotch Pig-iron opened on Monday at 79s., and has fluctuated according to the pressure of sales to meet prompt, from that quotation to 81s. 6d.; the market closes at 79s.

SPELTER.—Some large transactions have been done at 21s. 10s., 22s., 22s. 10s., at which the market leaves off firm.

COPPER.—An advance has taken place of 1d. per lb.

SWEDISH IRON AND STEEL.—Without alteration. TIN-PLATES.—Inactive.

GLASGOW, Nov. 21.—We have had a deal of business doing for two days back, at 80s., and prices looked as if they would go up, but to-day the definitive announcement of the amount of the reduction of French duty on its import has given a check to speculation, and we close rather quiet, with sellers at 80s., and buyers at 79s. Manufactured iron is very prosperous, and the demand, independent of high rates, continues very good. The quotation for common bar is now 10s. to 10s. 10s., according to brand.

LIVERPOOL, Nov. 24.—The demand for Manufactured Iron, during the week, has been extremely active. A large business has been done in Welsh bars and rails, and 5s. per ton advance has fully been realised. The Staffordshire ironmasters are also so full of orders that they are refusing to enter into further contracts, except at prices current when the orders are executed. Scotch Pig-iron has fluctuated considerably. In anticipation of the reduction of the French duties, the price was run up to 80s. per ton cash, but the extent of the reduction now declared is much less than was looked for, and this afternoon was closed with eager sellers, at 79s. per ton. Tin Plates continued full of sale, and without change in price. In Lead and Copper no change.

NEW YORK, Nov. 12.—Pig-iron is selling in small parcels at \$32 to \$33 cash, and \$33 $\frac{1}{2}$  to \$36 six months. It can be obtained at lower rates to arrive. Bars are with out alteration, and may be quoted at \$32 $\frac{1}{2}$  to \$35 six months for common, and \$35 to \$38 for refined. Sheet-iron is in demand at 4s. for singles, 5s. for doubles, 5s. for trebles. Russia sheets: Stock is light; the price firm at 12s. Tin-plates are a little lower, being offered at 10s. to 10s. 6d. for 1x 3s. Sheet Zinc: Sales at 8s. Spelter: 150 tons sold at prices not transpired. Banca Tin is held at 31s. six months, and 29s. $\frac{1}{2}$  cash. Copper is without alteration; sales are made at quotations. Lead: 150 tons of Spanish sold, to arrive at \$6.35 to 6.50 for hard and soft; Galena is held at 6s. $\frac{1}{2}$ ; 50 tons English sold at 6.45, and 50 ditto German at 6.44 cash.

MINES.—The rise in the price of copper again this week has given a fresh impetus to dividend mines, and a large business has been done in shares, in many instances at advanced rates. A rise is also expected in lead, and a few enquiries have been made for Mary Ann, Trelawny, Herodfoot, &c. West Caradons have advanced to 260s. to 270s.; South Caradons, 300s. to 320s.; Basset, 625s. to 650s.; South Tolugs, 130s.; Alfred Consols, 25s. to 25s. 10s.; Great Baldern, 11s. 5s.; United Mines, 205s. to 215s.; Cwm Darren, 7s. 6d. to 12s. 6d., and in demand; Herodfoot, 27s. 10s. to 10s.; South Tamar, 6s. to 6s. 6d.; West Providence, 38s.; West Alfred Consols, 15s. to 16s.; Great Alfred rose to 42s., and subsequently dropped to 37s. 40s.; East Pool, 160s.; Hindston Down, 7s. to 7s. 10s.; St. Day United, 2s. to 2s. 6d.; Tincroft, 5s. 10s. to 6s.; Tamar, 2s. to 2s. 10s.; Hope Valley, 3s. to 4s.; Buller, 10s. 6d.; Bedford United, 7s. 10s. to 8s.; Poltimore, 12s. 2s. 6d.; Condurrow, 130s.; Gonamona, 12s.; Kirkcudbrightshire, 3s. 17s. 6d. to 4s.; Trevisey, 35s.; Eaglebrook, 10s. to 11s.; call paid; Rocks and Treverbyn, 3s. 10s. to 4s.; Trannack and Bosence, 5s. 10s. to 6s.; Halkyn Castle, 15s.; Clive, 1s.; Bryntall, 3s. 10s. to 4s. There is a great rage just now for trying gossans and quartz from different Cornwall and Devon mines, by Berdan's gold crushing machine, which certainly performs its work admirably, and in many instances with promising results for the mines. On Wednesday last 5 cts. of gossan, taken promiscuously from different levels in the Molland Mine, North Molton, were tried, and yielded at the rate of 14 dwt. of pure gold per ton of ore; as there is a considerable quantity of the gossan, which can be raised at little cost, this is considered very satisfactory.

The buvant state of the Metal Market has been almost a constant theme of remark by us for nearly this last year and a half; and although there have been several inconsiderable fluctuations intervening, we have continually endeavoured to impress it upon our readers that, whilst there is not an unhealthy and over-production, the natural consequences are, and ever will be, something approaching towards a remunerating price, if not a really good one. The latter is now the case, and with present rates the mining interest ought to rest satisfied, and not anticipate, wish, or expect more. A fortnight back we had to announce the rise of 9s. 10s. per ton on Cake Copper, and 1d. per lb. on Sheathing. The sales of foreign ore taking place at Swansea are so much less in quantity to what they were, that the smelters have this week advanced the price again 9s. 10s. per ton, and 1d. per lb.—the present rates being 126s. per ton for Tough Cake and Tile, and 1s. 2d. per lb. for sheathing. The price of Yellow Metal is 1s., altogether an advance of nearly 20 per cent. Some interest has been excited by the sale at Swansea of 7 tons of rich ore from Greenland, the produce of which was as high as 22 $\frac{1}{2}$  and 30 $\frac{1}{2}$  per cent., and there are 11 tons of it for sale again on the 6th proximo. Coming, however, from so remote a place as the Arctic regions, we understand that even this rich quality ore will not be sufficiently remunerative, the expenses being very high.

The arrivals at Swansea include—From Coquimbo, 81 tons of copper regulus, 519 tons of copper ore, and three boxes of silver ore; from Cuba, 400 tons of copper ore.

At Wheal Buller meeting, on the 15th inst., the accounts for Sept. and Oct. showed—Balance from last account, 1112s. 7s. 7d.; ores sold (less dues), 12,015s. 2s. 9d.—13,127s. 10s. 4d.—Mine costs and merchants' bills, 3903s. 18s. 2d.—By dividend of 30% per share, 7680s.: leaving balance in favour of adventurers, 1453s. 12s. 2d.

At Wheal Owles meeting, on the 18th instant, the mine cost for July, Aug., and Sept., showed—Tin sold, 5349s. 11s.; subsist receipts, 168s. 11s.; sundry credits, 198s.—5716s. 2s.—Labour cost, 2358s. 13s. 9d.; carriage, 127s. 6s. 6d.; lord's and bounds dues, 226s. 9s. 1d.; merchants' bills, 1473s. 10s. 2d.; subsist advances, 167s. 4s.; leaving profit, 1362s. 18s. 6d.; ad. balance from last account, 156s. 2s. 1d.—1819s. 0s. 7d.—Deducted dividend (12s. 10s.), 1000s., leaves balance to next account, 819s. 0s. 4d.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 9216s., being 9s. per share, out of profits from sales of copper ores, sampled in the months of July and August last. After payment of the same, there remains in hand a balance of 21,369s. 11s. 7d. in cash, ore bills not at maturity, and reserved fund, applicable to the general purposes of the company.

At the Wheal Margaret meeting, on Tuesday, the accounts to end Sept. showed—Tin sold, 3761s. 11s. 9d.—Balance last account, 48s. 10s. 4d.; mine cost, 2011s. 12s. 9d.; coals, 229s. 1s. 6d.; merchants' bills and lord's dues, 710s. 8s. 10d.; dividend of 6s. per share now declared, 672s.; leaving balance in favour of mine, 80s. 13s. 1d.

At Great Work meeting, on Tuesday, the accounts for July, August, and September, showed—Balance from the last account, 365s. 3s. 10d.; ores sold, 448s. 4s. 10d.—1795s. 8s. 8d.—Mine costs and merchants' bills,

3822s. 19s. 4d.; dividend of 5s. per share, 595s.: leaving a balance in favour of adventurers, 380s. 9s. 4d.

At Trevisey Mine meeting, on Monday, the accounts for four months, ending Sept., showed—Balance from last account, 290s. 10s. 6d.; ores sold (less dues), 1824s. 8s.—2115s. 3s. 6d.—Mine costs and merchants' bills, 1867s. 18s. 11d.; dividend of 2s. per share (240s.): leaving balance in hand, 7s. 4s. 7d.

At Alfred Consols Mine meeting, on the 14th inst., the accounts showed—Copper ores sold (less lord's dues, 1-18th, 441s. 4s. 10d.), 7501s. 2s. 2d.; sundry debts, &c., received from men, 5s. 10s. 10d.—7506s. 13s.—Labour cost for August, 919s. 7s. 4d.; September, 871s. 1s. 4d.; doctor and club, 211s. 7s. 7d.; subsist advanced, 106s. 10s.; Great Wheal Alfred two months' water charge, 62s.; merchants' bills, 716s. 14s. 6d.; Captains White and Hosking gratuity (as per resolution Sept. 19), 40s.—2736s. 9s. 9d.: showing balance, profit 4770s. 6s. 3d.; and in hand last account, 1385s. 14s. 9d.—6156s. 1s.; by dividend of 18s. per share, now declared (4601s.), leaves balance in hand, 1548s. 1s.

At the Bedford United Mines quarterly general meeting, on Tuesday, the accounts showed—Balance from last account, 1426s. 8s. 4d.; ores sold, 2997s. 3s. 4d.—4423s. 11s. 8d.—Mine cost, July, 627s. 6s. 11d.; August, 619s. 0s. 10d.; Sept., 663s. 7s. 2d.; office expenses for three months, including secretary's and assistants' salaries, 20s.; stationery, printing, &c., 9s. 19s. 6d.; dues on ore, April to Sept. inclusive, 379s. 5s. 10d.; Sept. dividend (3s. per share), 600s.: leaving balance in favour of adventurers, 1504s. 11s. 5d. The assets showed a balance of 2999s. 5s. 4d. over the estimated payments before the next meeting in February. A dividend of 4s. per share was declared. Mr. Wolferstan stated that the engine-shaft was sunk 10 $\frac{1}{2}$  fms. below the 115; the lode was 3 ft. wide, yielding saving work; the ground, which was very hard, appeared to be changing. In the 115 east the lode was 2 $\frac{1}{2}$  ft. wide; it produced for the last three months 4 tons of ore per fm., and continued equally good.

At the Black Craig Mine meeting (Mr. Charles Gilpin in the chair), the accounts showed—Balance from last account, 939s. 13s. 9d.; ore sold, 2431s. 14s. 10d.; materials supplied to East Black Craig Mine, 246s. 17s. 11d.; ditto to Bargally Mine, 18s. 3s. 9d.—3636s. 10s. 3d.—Mine cost, May to Sept., 218s. 8s. 10d.; July dividend, 62s.; royalty, 178s. 5s. 9d.; management, two quarters, 168s. 3s. 9d.; insurance, &c.; 31s. 13s. 10d.: leaving balance in favour of adventurers, 444s. 18s. 1d. The amount of assets over liabilities showed balance in favour of mine, 867s. 7s. 4d. Mr. R. Williams reported that it would be advisable to sink the engine-shaft 10 fms. below the 52; or, in the event of the adventurers wishing to avoid outlay, to sink in the 52. They could sink 10 fms. in the black-stone, and drive cross-cuts north and south, until they discover ore to warrant it. Mr. Fernie having lately visited the mine, explained its state, and recommended the work to be carried on as proposed by the agent, and which could be, perhaps, done without a call, which was resolved accordingly.

At Gwawen United Mines meeting, on the 19th inst. (Mr. P. Stainsby in the chair), the accounts for three months, ending with October cost, showed—Balance last account, 16s. 2s. 10d.; balance of calls, 886s. 15s. 903s. 7s. 10d.—Mine cost for Aug., 2351s. 14s. 1d.; Sept., 261s. 8s. 5d.; Oct., 169s. 18s. 2d.; merchants' bills for June and July, 182s. 2s. 11d.: leaving balance in favour of adventurers, 54s. 4s. 3d. A call of 5s. per share was made, payable forthwith. The salary of Capt. Horswill was increased to 8s. 8s. per month, and the services of Captain Bray and Mr. Nicholas were dispensed with. A vote of thanks was passed to the chairman.

At Clijch and Wentworth United Mines meeting, on the 14th inst., the accounts showed—Balance last account, 525s. 10s. 5d.; mine cost, June to Sept. (both inclusive), 794s. 11s.; merchants' bills, 450s. 6s. 3d.; London office, 10s. 10s.—1780s. 17s. 8d.—June call, 78s.; copper ores sold (less dues, 20s. 7s. 11d.), 347s. 5s. 2d.: leaving balance against adventurers, 665s. 12s. 6d. A call of 1s. per share was made. The agents' report stated that the 30 fathoms level east was extended about 7 fathoms the lode producing good stones of strong yellow ore; this level, they had no doubt, would prove productive. The stopes in the back of the 20 fm. level were worth 15s. per fm. Capt. W. Martin reported that, looking at the present prospects in the 20 fm. level east, he thinks it will yield 20 tons of ore per month; the 30 east from 3 to 4 tons, worth about 6s. 10s. per ton—say, 15s.; and the four pitches on the engine lode must have about 60t. worth of ore, making together 210t. per month at the present time. But the quantity of ore he believed would progressively increase from the Julia lode, and that Clijch would prove profitable and lasting.

At Wheal Chiverton meeting, on the 14th inst., the accounts for Aug. and Sept. showed—Balance last account, 1225s. 1s. 3d.; mine cost, Aug., 300s. 8s. 6d.; Sept., 230s. 5s. 1d.; merchants' bills, 540s. 19s. 2d.; dues, 182s. 2s. 6d.—2315s. 9s. 8d.—By call, 19th Sept., 1228s. 16s.; tin sold, 338s. 2s. 6d.: leaving balance against adventurers, 748s. 11s. 10d. It was resolved that the same be divided pro rata amongst the shareholders, and collected forthwith. Captains Thomas Richards and Arthur Waters reported that they had opened, and in above the 40 fm. level, sufficient tin-stuff to keep 30 heads constantly at work for the next two years. They had no doubt that in future their returns of tin would be much more than the expenditure, and their sales of black tin would be very considerable.

At Wheal Speedwell meeting, on the 14th inst., the accounts for Aug. and Sept. showed—Balance last account, 426s. 0s. 3d.; mine cost, Aug., 338s. 0s. 9d.; Sept., 235s. 5s. 7d.; tributes, 32s. 10s.; dues, 20s. 1s. 10d.; merchants' bills, 152s. 4s. 9d.—1204s. 3s. 2d.—By call made in Sept., 426s. 13s. 4d.; copper ore sold, 361s. 12s. 11d.: leaving balance against adventurers, 415s. 16s. 11d.; to be divided pro rata, and collected forthwith. The agents' report stated that the ground opened in the 60, west of engine-shaft, contained some good tin-stuff. The 50 was driven west of flat-rod shaft 8 fms., where the lode was 18 in. wide, containing good stones of ore. They expect a good lode for copper as soon as the 50 is driven under the winze sinking below the 40 fm. level, 13 fms. east of flat-rod shaft.

At the Devon Tin Mines (Dartmoor) adjourned meeting, on Tuesday (Mr. Josiah Hitchins in the chair), a report was read from Mr. Samuel Perkes, C.E., which will be found in another column. It was agreed to take a lease from the Duchy of Cornwall of a piece of ground to erect a suitable residence for the captain, also houses for the miners. Captain Ware, who was in attendance, considered the mine making very favourable progress. He expected in four or five months to commence stoping, when good returns of tin would be made.

At the Bosorn Mine bi-monthly meeting, on Thursday, the 17th inst., the accounts showed—



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## Notices to Correspondents.

**EXTRAORDINARY GIFT BY A MINER TO THE WESLEYAN MISSIONARY CAUSE.**—Sir : I have observed with some surprise, in your Notices to Correspondents of last week, a letter, signed "A Wesleyan," City-road, written, I fear, not from the best of motives, commenting upon the unparalleled munificence of Mr. S. Wilkes towards the Wesleyan Missionary Society, and certainly more fitted for the pages of a religious journal, than the scientific column of the *Mining Journal*. Perhaps you will allow me to inform "A Wesleyan," that the account of the Wesleyan Missionary Society is always made up from the 1st January to the 31st December in each year; and that the first promise made by Mr. Wilkes, of subscribing 1 guinea per day, was intended for the year 1852, and by referring to the last Report, which ends 31st December, 1852, he will find entered, under the head Wolverhampton Circuit, "Mr. S. Wilkes, a subscription of 1 guinea per day, 384. 6s." The second offer of Mr. Wilkes, of 7 guineas per day, was made for the year 1853, and there is no doubt of this offer, in due time, will be found to have been conscientiously redeemed, when the accounts for that year are published, which will not be until the early part of 1854. The last most astounding and unprecedented promise, of 49 guineas per day, is for the coming year 1854, and this promise, also, there is no reason to fear, will be faithfully fulfilled, if God's blessing enable him to perform the covenant.<sup>1</sup> May this truly noble scale of giving prove the commencement of a new era in Christian liberality, and induce "A Wesleyan" and many others to go and do likewise.—THE BLACK DIAMOND : Kilburn, Nov. 22.

**COMMERCIAL STATISTICS.**—Mr. Braithwaite Poole's statistical works were published by Messrs. Smith and Son, of the Strand, London; and can be procured through any of their agents, at the various railway stations.

**THE TIN TRADE.**—Sir : Will any of your esteemed correspondents favour me with the addresses of the principal tin smelters in Cornwall, or elsewhere?—V. A. : Nov. 22.

**IRISH MINING COMPANIES.**—Sir : I perfectly agree with the majority of the structures, sever as most of them are, coming from the shareholders of several of the Irish mining companies against the directors. Since some of them have been established, and on the Cost-book System too, they have not had a single meeting, at least the shareholders have not been apprised of any, nor have they any report from the directors; a large sum of money has been paid, but no account whatever of the disbursements. The Irish Consols Mining Company was established about the same period; they have held two quarterly meetings, since, of which the shareholders were apprised and requested to attend, the report of each meeting was printed, with a clear statement of the accounts, and transmitted to each shareholder; this was doing business as it ought. But one question allows me to ask.—Can the public or shareholders have confidence in a management which keeps all information from those who are entitled to receive every satisfaction at the regular and stated times, which was promised to them, and on the faith of which system they embarked their capital? The question I now put, through the columns of your useful publication, to the directors of the several mining companies is.—Why they have not held their regular meetings, and transmitted their report, together with a statement of the accounts, to their shareholders? and which should be done in accordance with the cost-book rules. I pause for a reply, and hope I shall not be compelled to take other steps.—AN IRISH SUBSCRIBER : Dublin, Nov. 22.

**"Refiner"** (Swansea).—In Sweden, at the smelting-works of Falun, the assay is always taken by an iron bar; about 200 tons of copper are produced there annually. The mines are the most ancient in Europe, having been worked over 1000 years. It was here that Gustavus Vasa was concealed while under the ban of Christian II. of Denmark. Attached to the mines is a laboratory and school for students in practical mining and mineralogy.

**CUBERT UNITED MINERS.**—If "J. S. T." and Co. of Clement's-lane, have done business in these shares at the price they forwarded to us, we can assure them they have made an "alarming" sacrifice.

**TASMANIAN COMPANY.**—Sir : As a shareholder in this undertaking, I have been surprised that no reports are furnished to your Journal; not a line, as I believe, having appeared for the last six months. I trust the insertion of this note will arouse the management to a sense of duty to their co-proprietors; and, as I understand the working, are proceeding satisfactorily, I am at a loss to account for their apathy.—W. H. : City, Nov. 24.

**PEMBROKE AND EAST CRINNIS MINES.**—In answer to an enquiry in the Notices to Correspondents in your last Journal, signed "One Interested" (St. Blazer), I beg to state, that on referring to the manager's report of Oct. 29, he states, "The lode in the 70 ft. level, west of Reid's, where a pitch is set at 2s. 8d. in 1/4, is 18 inches wide, producing 3 tons of ore per fm., worth 20/- per ton, equal to 60/- per fm." If "One Interested" still doubts, he had better pay another visit to the mines, and satisfy himself.—EDWARD KING, Sec. : 57, Austinfriars, London, Nov. 23.

**"Disappointed" (Cornhill).**—As accounts have arrived that so soon as the machinery is erected the returns will be sufficient, not only to pay expenses, but likewise afford a surplus, and as this must come to hand before the second instalment is payable, it would be as well to wait the solution of the problem so anxiously expected, so long deferred.

**LONDON AND CALIFORNIA GOLD QUARTZ CRUSHING COMPANY.**—Sir : I am a holder of some shares in this company, which I purchased about 18 months since. I was induced to do so, partly because of the apparent feasibility of the scheme, but chiefly because I saw the well-known name of Professor Ainsted on the direction—a respectable name being of the first importance in all schemes of this nature. Since the formation of this society, there has been no public meeting of the proprietors, and being naturally desirous of obtaining information concerning my property, I have applied at the only place likely to obtain it—viz., at the office of the company; but I can there only learn that the name upon which I relied no longer stands on the list of the direction; but how they have disposed of the money entrusted to their care, or what success they have met with, they refuse to give any account of, on the ground that I am not entitled to ask such information, because I have not signed their Deed, notwithstanding the statement which stares you in the face of each certificate of shares, that the holder of each is a proprietor of so many shares. I have, therefore, to ask your aid in this matter, believing that you are anxious to do all in your power to promote integrity and openness in the management of these undertakings. This company has now been established nearly two years, and must have something to tell, and, if it be bad or good, it ought not to be withheld from those who are entitled to the information—viz., the present holders of the shares. I hope, Sir, that you will lend your powerful assistance towards arousing this dumb and inert body.—VIGILANT : London, Nov. 22.

**ELECTRIC GAS COMPANY.**—Sir : Will you allow me to enquire, through your Journal, from what source do the Electric Gas Company propose to derive electricity, whether from permanent magnets, or a battery? Am I to understand that each person makes his own gas, or the company manufacture on a large scale and send it through pipes? How is it applicable to the wants of the railway company who have entered into the patent with them? Whether for lighting purposes or motive power? If the latter, wherein consists the novelty?—JOHN L. MAGUIRE : Upper Dominic-street, Dublin, Nov. 19.

**PUBLIC MEETINGS v. THE PUBLIC PRESS.**—Sir : As it happens that some few fastidious gentlemen have suddenly taken alarm at the presence of reporters for the press, and thus attempted to stifle information, which every shareholder expects and is entitled to receive, and, as you are at all times willing to give effect, through the medium of your valuable columns, to the important discussions which frequently arise at such meetings, will you allow me to suggest a remedy, which would have the effect of utterly defeating the object of the parties in question? That your eloquent antagonists will find you too powerful for them, I have not the slightest doubt (indeed, no one can come to any other conclusion, who has observed the spirit with which the *Mining Journal* is conducted); but the plan I would submit, although perhaps a novel one, could be easily accomplished, and would at once and effectually put a stop to the annoyances to which you and your contemporaries are occasionally subjected, and of which the mining interest has so much cause to complain. In a word, let any shareholder, desirous of eliciting the truth and of maintaining the position and future prospects of the company in which he has been induced to invest capital (where such company wishes to suppress facts), transfer for the time being a small number of shares to your reporter. They would be in perfectly safe hands; and, from what I have seen in your columns of the reports of meetings which I have attended as a proprietor, I am perfectly satisfied your representative would discharge his duty conscientiously and fearlessly, and would be influenced by no other feeling than that of a strict sense of justice to all parties. Trusting that the mining interest will ever bear in mind that they have in you an unflinching exponent of abuses, and a powerful supporter of truth and justice, the last which I have ventured to throw out will not, I hope, be lost sight of.—OS. LEAVENS : *Bass*, Nov. 19.

PRIZE ESSAY ON THE COST-BOOK SYSTEM.—We are authorised to state, that the award of the Juries will appear in our next Journal.

**GRAND DUCHY OF BADEN MINES.**—Sir : Having just returned from the continent, allow me to reply to Capt. Eddy's observations in your Journal of the 9th inst., that I did not state "Capt. Eddy had recommended an agent to inspect the Baden Mines," but that "the gentleman who reported was introduced to me through Capt. Eddy." A few weeks back I requested a mutual friend to go to Grassington, to invite Capt. Eddy himself to inspect some mines in Germany. He stated his inability to accede to the request, but named Capt. Barratt, of Coniston, as a most efficient substitute. My friend went down to Coniston, and found Capt. Barratt also unable to leave, but, at his recommendation, his brother, Capt. J. Barratt, of Strontian Mines, was induced to go in his place. For any body who has had the pleasure of listening to Capt. Barratt's remarks, any introduction or guarantee is quite superfluous; but having mentioned Captain Eddy's name, I am bound to explain how I came to do so.—T. C. BANFIELD : Nov. 25.

"A Subscriber" (Staines) is informed, that we never received the returns of the sale of the secretory of Wheal Kitty. We are at all times anxious to obtain and publish such information.

**FALSE PRICES OF MINING SHARES.**—Sir : It was with pleasure I read your remarks in the Journal of the 12th inst., respecting the false prices of mining shares—which is frequently caused by managers, or jobbers, who can influence the market, so as to raise or depress their value, and this is one cause which deters many parties from investing in them, such property being liable to deterioration any day, without any immediate cause. I should be glad to see a Mining Exchange established, for it would in great measure obviate this evil. For example, witness Tremayne, which have lately been forced down without any definite reason; these shares were selling at 35/- less than 12 months since. Trethane was a few months since worked upon in an opposite manner, and forced up, without anything in the prospects of the mine to warrant such advance; they have, consequently, now receded. To ascertain any approximation to the true value of mining shares, it requires some knowledge of authentic data; such as the position of the mine, the respectability of the management, and the average working expenses; the dividends calculated at three or four years' purchase will often prove a guide; while in some instances, where the mine is deep, and may be expected to be approaching its limit of existence, the value of the plant upon it should be ascertained; such are East Wheal Rose, Treseavean, Dolcoath, Treviseley, &c., which by the amount of dividends per share, given in your excellent Journal, may be seen to have been in their day first-rate mines, and no doubt have, as was stated in the report of East Wheal Rose a few months since, a large amount of machinery upon them. Other young mines, and those more especially not in the Dividend List, ought to be cautiously invested in; while some which have paid one or two dividends, and then dropped them for a time to erect more powerful machinery, have sunk below their real value: instance Rix Hill, Gonamena, Merlin, though the latter of these has more cause for depreciation, from its diminished sales.—A CONSTANT READER : Nov. 23.

**MINE SHARE DEALING.**—Sir : The *Mining Journal* has at different times adverted to the fact that the seller of shares in mines has no proof that the full amount realised by his shares has been paid to him. Permit me to suggest, through the Journal, that a lit. receipt stamp should be affixed to each transfer, and that the purchase money should in all cases be stated in such transfer. I know that this plan can give no reasonable offence to any honest broker; and the first person who adopts it will have a large increase to his business.—G.

**WHEAL FORTUNE (South Tawton).**—Sir : The committee continue to pursue their attempts to illegally conduct the affairs of this company, by reducing the number of shares from 3000 to 4000. I fearlessly assert, they cannot maintain that position; and, as the original number was never filled up or paid upon, they had better wind up the old company and re-constitute it.—DIOGENES.

**GREAT HEWAS UNITED MINE.**—Sir : In reply to your correspondent, "A Shareholder in Great Hewas United," I need only remark that I am not aware of any respectable person having called at the office of the company for shares at par, and with money to pay for them, who did not receive them. Your correspondent must have been misinformed.—ALEX. PETER : 12, Bishopsgate-street Within, Nov. 21.

**CORD MAW POOL LEAD MINE.**—Sir : For several months I have been quite perplexed at the various changes in the plan of working this property, the system of finance, &c.—no two months appearing to confirm what the former attempted to carry out. Where there is no fixed plan of operations in mining, we are all aware there can be no good result; it is like a ship at sea, without rudder or compass, drifting where the wind and tide wafts the unmanageable bark. As they now console themselves in having the *ne plus ultra*, I hope they will persevere, and that the result may prove satisfactory to all concerned.—DIOGENES.

**TRAWETHWA MINE.**—Sir : In your last Journal, in my report of this mine, it is stated that the lode in the stop south of cross-cut "is worth only 4/- per fm.," whereas it should have been "worth 14/-."—W. ROWE : Nov. 24.

**PEMBROKE AND EAST CRINNIS.**—"A Shareholder" (St. Blazer) is informed that Mr. Reid is the visiting director of the mine. He visits the mine once a month, for which, we believe, he charges 20 guineas, but the amount can be ascertained by inspecting the accounts at the offices in Austinfriars.

"A Constant Reader" (Tower-hill).—The affairs of the Irish Waste Land Improvement Society were put in a train for winding-up in the latter part of the year 1849. The Earl of Devon was the chairman, and Mr. Maude of the Mexican Company, the secretary. At one period of its existence it held out the promise of offering great benefits on the population: the estates of Ballincollig, Killarney, and Glanmire, in Connaught, were vastly improved, and would, doubtless, have become thriving and profitable properties, and a marked improvement was observable in the habits and industry of the peasantry. Many of the shareholders, however, withholding payment of large arrears of calls, among whom was the late Mr. D. O'Connell, and others getting tired of continually advancing funds, without immediate and only a chance of prospective return, the estates were surrendered or sold, and the society broken up.

"Thesis" (Stamford).—Ferrate of copper is of a steel-grey colour; it occurs massive and crystallised, in the form of a tetrahedron. It is composed of copper 52, iron 23, and sulphur 14; it also occurs with a proportion of arsenic and antimony, and rarely with a small portion of platinum. It is found in the same localities as native copper, and is accompanied by its various ores, but is less frequent in Cornwall than the other varieties.

A late pressure on our space has compelled us to postpone the publication of several papers, and letters from correspondents.—Received : "Hibernicus," "Pedro," "Wm. Baker, Camelot;" "Observer," Truro ; "14/- Premium."

**ERATUM.**—In our article, in last week's Journal, on the School of Naval Instruction at Portsmouth, the 39th and 40th lines from top should read—"We have no hesitation in avowing our belief, that the latter gentleman (Mr. Rawson), as a pure mathematician, is every way the equal of the former (Dr. Woolley)."

**THE MINING JOURNAL**  
Railway and Commercial Gazette.

LONDON, NOVEMBER 26, 1853.

The meeting for the purpose of establishing a SCHOOL OF MINES in Cornwall, connected with the central establishment in London, as referred to in our last Journal, cannot be otherwise than productive of beneficial results to mining enterprise, attended as it was by persons of all sections and opinions: however they seemed to differ with regard to the details in which the proposed measure should be carried out, we think we are not assuming too much when we state the general opinion was that such an institution was highly desirable, and would greatly benefit the mining interest of all classes—lords, adventurers, and labourers. Previous to, and since the rejection of, Sir CHARLES LEMON's magnificent offer, we advocated the establishment of such an institution in this country; but we believe some misapprehension has taken place, the generality of our readers imagining that it was our wish to see founded some institutions on the principle of those long since established in other countries, to adopt all their failings, render practice subservient to science, and thereby sacrifice all the pre-eminence we have hitherto gained by the operative skill of the British miner.

We heartily concur with Mr. W. J. HENWOOD (than whom there is not more competent authority), that in practical knowledge our miners are far superior to any in the globe, and mines scientifically conducted by Germans and French had shown themselves, both as to design, expense, and actual mining labour, inferior to those of Cornishmen; and his proposal of the appointment of several eminent captains on the committee was one of the most felicitous resolutions of the meeting, thus uniting, as it ultimately must, a theoretical science and practice, so that they may ultimately benefit each other. As Mr. ENVS observed, it may be probable in some German and French mines the care they took in saving candles amounted to a great deal more than the saving effected; but we do not imagine he has seen the lamps used in Saxony, where the mines are as deep as many in Cornwall; these are furnished with reflectors, and at less than one-fourth the cost, give more light than candles; indeed, the saving is so great, that Mr. STEPHEN HENRY THOMAS, Cornish miner of no mean repute, the manager of the Alton Copper Works, has for the last ten years adopted them there, and found them not only less expensive in cost, but giving more light than the ordinary candles, and this in a country where the latter material can be obtained of as good quality, and manufactured at a much cheaper rate than in England. If there is to be a question between practical and scientific knowledge, then we are of opinion with Mr. R. W. FOX, the former is more to be desired; but, as he justly observes, if they could unite both, it would be of great service to the British miner. His views were, that it must commence in some way, perhaps on a small scale, and to begin with too much, perhaps, might damage the project; as the institution became valuable, and was found more useful to the county, they might extend it. If information were diffused from place to place among the miners, it would induce in them an anxiety to become acquainted with some of the lesser points of mining, which, notwithstanding, were found to have an important bearing on the mining interest, but which were lost from the want of a central place, and means to register these facts. A school of this kind might be found to be of very great importance to practical miners, and cause them to impart information to

those who were more attached to the scientific part of it. This would be useful to both parties, and promote not only the interests of science, but those of practical mining. The remarks made by Mr. KENDALL we can by means agree with: we alluded to them briefly in our last, and, carefully reconsidering them, briefly, their purport appears to be, that if the miner is educated he will not return to his avocations, and thereby become useless as a practical man; at the same time, he expressed himself that no one desired to have a scientific miner more than he did. Although we believe the idea was well intentioned of the Rev. Canon ROGERS, we believe little utility would be gained from peripatetic professors, wandering from mine to mine, to offer instruction after the day's hard labour was terminated: the mind requires relaxation, and after eight hours underground, it cannot be supposed a man is so fitted for study and reflection as he would be if he had come to the school without undergoing previously this toil.

Among the most feasible plans of the day was that of Mr. R. Q. COUCH, that after a youth had received an elementary education in the national or district schools, and then acquired practical knowledge as a miner, at the same time, if he showed superior powers of observation, he could be removed to the School of Mines, in order that he might be instructed by professors, who have arranged and systematised the laws of chemistry, mechanics, mineralogy, and geology, and so take advantage of anything he might see in his working; and that the local mechanical institutes of the county might be turned to advantage as foundations for the School of Mines, and places for the delivery of lectures on practically useful subjects connected with mining.

In addition to the appointment of an influential committee, the following resolution, which we recapitulate from our last Journal, was proposed by Mr. MICHAEL WILLIAMS, and seconded by the Rev. Canon ROGERS, and unanimously agreed to—"That increased means of improving the education of miners, mechanics, and others, as applied to the arts and sciences, is desirable, and calculated to be very beneficial to the great interests of the county." Though this shows the spirit of unanimity that prevailed, and the desirableness of increasing knowledge, yet we cannot but regret that some more definite result has not been arrived at; and we should have seen with more satisfaction had a rider been added to the resolution, that the committee be empowered to prepare some plan to further the objects of the meeting, with a view to some active steps being taken, so that the desired object might be carried out. We will not think that the question will be allowed to rest here; an onward movement has been made, and all concerned are bound individually and collectively to see that it shall not recede.

We consider one of the greatest results of the Great Exhibition was the establishment of the Central School, in connexion with the Museum of Economic Geology; and though this has been of great utility, yet it is too far distant from any mining locality to impart knowledge to those who most need it. The impetus once given in Cornwall, there is every hope that schools will be established in the coal and iron districts, as well as in Derbyshire; but until the most important mineral county in the United Kingdom sets the example, it cannot be expected that those not possessing half its wealth, resources, or means of practical illustration, should make any step in furtherance of this national object. The World's Fair, in 1851, showed us that, superior as we were in every department of utility, yet that we had much to learn from foreigners: day by day they are advancing in every branch of manufacture: we cannot stand still; we must not retrograde; and it is only by a wise use of the appliances of science that we can maintain our present proud and pre-eminent position. This combined with our natural energy of character and matter-of-fact knowledge, will not only enable us to compete with the other nations of the world, but assure us of our superiority. We would not have that the trivialities, the technicalities, or the peculiarities of the foreign schools of mines should be engrained on our system; that which is useless and not practicable should be rejected, but those points from whence information can be gleaned we should avail ourselves of. The system of tribute is too far distant from any mining locality to impart knowledge to those who most need it. The impetus once given in Cornwall, there is every hope that schools will be established in the coal and iron districts, as well as in Derbyshire; but until the most important mineral county in the United Kingdom sets the example, it cannot be

forward with great anxiety to the resolutions of the committee, as that will be the first practical step towards attaining this important object. The suggestions we have thrown out are by no means in spirit of dictation, being convinced that the cause is in good hands; but the magnitude of the subject would not allow us to be silent; and if we have not expressed ourselves so ably as so great an enterprise demands, we must request that the will be taken for the deed.

Our anticipations that the strikes of the colliers were drawing to a termination have been to some extent realised; and we confess that we read with pain that many of the men had returned to their work without their picks, which they had been forced, during the long period of their idleness, to pledge or sell in order to procure bread. While we deeply deplore the very humiliating state to which they had thus reduced themselves, we were gratified to perceive a kindly feeling evinced by their employers to those who had returned. It is remarkable that the coal miners are the class of all others who, in the general disaffection of the operatives to their masters, have excited and received least public sympathy. The overstocking of the markets of California and Australia with manufactured goods, a lull in the demand, and an unwillingness in the present disturbed state of Europe to enter into fresh contracts, had made the factory owners indifferent as to employing the operatives; whilst the latter naturally felt apprehensive of the factories being closed, and of their being thrown out of bread, or, at least, of their wages being greatly reduced. The coal miners had no such grounds for alarm; there was ample employment for them, and their wages so high that the earnings of four days' work were considered quite sufficient for their support. The consciousness that they are not to expect much commiseration in future under similar circumstances will, we trust, tend to prevent a repetition of similar follies. Every impartial person must applaud the independent spirit of the coal-owners at Wigan, to whose collieries the men have returned, in giving employment only conditionally, dependent on the resumption of work by all the men at all the collieries. The proprietors have been all equally victims of a capricious and mischievous confederation; and they are all bound in honour, as well as in prudence, to make common cause. By the masters assuming a firm and decided attitude, the malcontents will be taught once for all that a partial submission is to be treated but as a hollow truce, and that any reconciliation which is likely to be permanent must be general. When the men shall have resumed work at all the collieries without excepting any, we think we may promise on the part of the employers that the past will be forgotten to those who apply themselves assiduously to make up for lost time; and the men will then have ample opportunity of reflecting upon, and for the future avoiding, the bad advice of those who have so long severed them from their masters. We trust that they are by this time fully satisfied that the smallest portion of their earnings cannot be worse applied than in sustaining secret associations, and in paying and supporting those who for their own purposes incite idleness and discontent, and invariably lead their followers into misfortune. Fortunately for themselves, the coal miners in resuming their work fall back at once into full and remunerative employment; and it being now evident that they can at their ease earn considerably more than sufficient to support their families, it is to be hoped that they may become provident, and that the savings bank may be henceforth the depository of their surplus earnings. We presume that they are now pretty well assured that any money they have to spare could not be more unprofitably applied, than in supporting those, whose object and interest it is to create and perpetuate differences between the employers and the employed.

All persons who feel interested in our national prosperity must see with pleasure, that the union of the seamen in the northern ports is not likely to prove so general, nor so formidable as had been by some anticipated. If the framers of the project had succeeded in embracing in the contemplated union the seamen of all the great coal shipping ports in Northumberland and Durham, the consequences might, indeed, have been alarming, but the good sense of the seafaring classes themselves has averted this calamity. This result may, perhaps, be to some extent attributed to the announcement which appeared in the Sunderland papers, that the ship-owners in the coasting trade had been driven to engage foreign seamen, in consequence of the proceedings of the seamen's union. As the latter had resolved not to sail with men who had not enrolled themselves in that union, the ship-owners had no alternative but to associate foreigners with those who were free to work for whom and with whom they pleased. Foreign seamen were accordingly beginning to enter freely, and it would have been the duty of the Government, and of all persons in authority, to do the work which they had refused. The gross illegality of such a course cannot be too forcibly impressed upon the operative classes of every description. Referring to the collisions between the owners and workmen of collieries, the late Lord Chief Justice TINDAL, one of the most popular and eminent judges that ever sat on the English bench, in addressing the grand jury of Staffordshire, observed, "Not satisfied with the exercise of their own right to withhold their own labour, if they were discontented with the price they received for it, they assume the power of interfering with the right which others possessed of exercising their discretion on the same point; and, accordingly, there have been numerous cases in which large bodies of dissatisfied workmen interfere by personal violence, and by threats and intimidation to compel others who were perfectly willing to continue to labour in their callings at the rate of wages then paid, to desist from their work, and leave the mine or manufactory, and against their own will to add themselves to the numbers of the discontented, than which a more glaring act of tyranny and despotism by one set of men over their fellows could not be conceived. If there is one right which, beyond all others, the labourer ought to be able to call his own, it is the right of the exercise of his own personal strength and skill, or the full enjoyment of his own free will, altogether unshackled by the control or dictates of his fellow-workmen; yet, strange to say, this very right, which the discontented workmen claims for himself to the fullest extent, he does by a blind perversity and inexcusable selfishness, entirely refuse to his fellows who differ from him in opinion. It is unnecessary to say that a course of proceeding so unreasonable in itself, so injurious to society, so detrimental to the interests of trade, and so oppressive against the rights of the poor man, must be a gross and flagrant violation of the law, and must be put down, when the guilt is established, by a proper measure of punishment." This emphatic language, coming from the highest judicial authority, cannot be too earnestly impressed upon the operatives of all classes, as explanatory of the law as it unquestionably exists for the protection of those who are willing to work, and for the prevention of outrages on the part of those who are bent on deterring them.

We have lately seen some of the effects of evil example, for we have had strikes within strikes in some districts. In the factories, the assistants of the working spinners, who are called piecers, have lately struck against their own direct employers; and in some instances apprentices have refused to work for their masters. Thus, retributive justice has subjected the men to some of the many inconveniences which they so heavily and so heedlessly entailed upon their own employers. While those who participated in the strikes are reproached by their families for the privations and sufferings which their wives and children so long endured, and of which they were the guilty authors, their own consciences must reprove them for the evil example which they have exhibited to the young.

We are free to admit that the memorial of the working classes, addressed to Lord PALMERSTON, was a more calm and temperate document than we had anticipated; but the operatives must have very extraordinary notions of the powers and functions of a Minister, if they imagined that the noble Secretary for the Home Department had any authority to direct the masters to submit to the dictation of the men. They might just as well expect that he could compulsorily regulate the rates of prices between the producer and the consumer of every article in the country, as the rates of wages between the employer and the employed. Various suggestions have from time to time appeared for legislative interference, and although the subject is one of extreme difficulty and delicacy, and must be approached with caution, so high is the public estimate of the administrative talents of that noble Lord, we may venture to predict that the matter is safe in his hands, and that, if any measure be practicable, the devising and carrying out of its details may be unhesitatingly confided to him.

Since the foregoing observations were written, we perceive that those who assume to be the leaders of the operative classes have proposed a new Project, which we confidently predict will prove more delusive than any

of the numerous and dangerous schemes which they have recently put forward. It appears that at a general meeting, held at Manchester, the following resolution has been carried:—"Resolved, it is imperatively necessary that a Labour Parliament should meet as soon as possible; that Parliament to consist of delegates, elected by the working men of each town in public meeting assembled; that the duties of that Parliament shall be to organise machinery whereby support may be rendered to the people now on strike, or locked out by the manufacturers, by raising a national subscription of the most extensive character." We cannot avoid considering this last device as a desperate effort on the part of those who have been so long misleading the people, to keep up appearances; and we attribute this lamentable absurd, but mischievous project, to a consciousness on the part of those who are the authors of it, that their followers are falling off and getting tired of them. It is not difficult to predict that it is destined to share the fate of the Chartists and other schemes, which have from time to time deceived and plundered the many for the gain of a few. A convention of this description, if it is not too contemptible to become even serious, presuming to assume the name and functions of the Legislature, will probably be found punishable at common law as a high misdemeanour; but should it attain a formidable shape, it will undoubtedly be reached by a special law. We allude to the subject, not from any apprehension that it will ever reach importance, but to caution the weak and well-intentioned not to suffer themselves to be made the dupes of still further deception.

In our last Journal we briefly alluded to the important discovery which had taken place in the Hayle district, and we feel great satisfaction at again alluding to it; inasmuch as it shows that when mining is conducted as an enterprise, and not as a speculation, in nearly every instance satisfactory results are arrived at. In former years this district was known as one of the most productive in the county; the Great Wheal Alfred has given to its proprietors upwards of £60,000 per annum; next to this is West Alfred Consols, an improving mine, which, if sunk deeper, according to the country, and the run of the lodes, must be a profitable mine. The mine adjoining this is West Wheal Alfred, which at a shallow depth has already produced a large quantity of ore, and gives every indication of a prosperous development. The mine next to this is Treloeweth; this has now been worked for upwards of 4½ years, with a shallow adit in the first place, and afterwards drained by means of a water-wheel, when but little ore was produced; subsequently an engine was erected, and the works prosecuted with vigour; the returns were but small, but the adventurers continued the workings with great skill and indomitable perseverance; the shaft has now been sunk to 80 fathoms, and there large rocks of ore have been met with of a high percentage. The stones which we have seen from there give every indication that this is a continuous lode, and will increase in productiveness and richness as it gets deeper. The mine is situated within a mile of the shipping port, and the carriage of ore and coal does not amount to more than £1 per ton. From the facility of shipping, and other advantages, there can be but little question that this mine, if carried on in the same persevering manner in which it has been done by the present adventurers, will become one of the most profitable in the county: we do not infer by this that it shall be a Devon Great Consols; such instances are but few and far between; but judging from the character of the district, and the quality of the ore, if the present proprietors continue their efforts, there is every prospect that their enterprise will be crowned with more than remunerative results.

On Saturday, the 5th of November, the Court of Exchequer granted a rule *nisi* to set aside a verdict for the defendant in the case of JONES and another v. GILES, tried before Mr. Baron MARTIN in Middlesex. It appeared that the plaintiffs had purchased a quantity of iron from the defendant, about two-thirds of which had been delivered, but the defendant having declined to deliver the remainder, the action was brought for the non-delivery, according to the contract. The defendant pleaded that the contract in question was made after the passing of the Weights and Measures Act, 5 and 6 WILLIAM IV., c. 68, and that the sale was contrary to the provisions of that Act. By the 10th section, it is provided that after the passing of that Act all articles sold by weight must be by avoirdupois weight, except certain articles therein specified, iron not being one of the articles excepted. By the 11th section, it is enacted that the weight denominated a stone shall in all cases consist of fourteen pounds avoirdupois, and that the weight denominated a hundredweight shall in all cases consist of eight such stone, and that the weight denominated a ton shall in all cases consist of twenty such hundredweights. The Act then provided that nothing therein contained should prevent any contract sale or bargain being made by any multiple or aliquot part, such as half, quarter, &c., of the pound weight. The Act then inflicted penalties for using weights or measures not authorised by the Act, and certain powers were given to magistrates at quarter-sessions. It appeared at the trial, that the iron in question was not sold by the statutable weight, and the learned Baron decided that the contract was illegal, and could not be enforced. In granting the rule *nisi*, to set aside the verdict for the defendant, and to enter it for the plaintiffs, pursuant to leave reserved at the trial, the Court seemed to intimate a strong opinion that the construction given to the Act was right. They admitted that the term *long hundred*, by which the iron in question appears to have been sold was a term well known in the northern parts of England, where it was also called the *long weight*; while the hundredweight of 112 lbs. is the southern hundred, that of 100 lbs. being the northern. Neither the one nor the other is correctly a hundredweight, which, strictly speaking, ought to be only 100 lbs. It would appear, also, that in the north of England several towns and several companies collect dues and transact business upon the long hundred, and it is said that they do so by virtue of several local Acts. If there be Acts which speak of the long hundred, meaning 120 lbs., as a weight, known and recognised by the Legislature, it must be known and recognised by the world. The question, therefore, now raised for solemn adjudication by the Court is, whether a contract to deliver iron by the long hundred of 120 lbs. is not in itself, by the words of the statute, absolutely void. If it be so decided, local regulations must at once give way, and the object of the Legislature must take effect by the practical assimilation of weights in every part of the kingdom.

An appeal from the decision of the Judge of the County Court of Northumberland, in the case in which FREDERICK EDWIN SCHULTZ, now respondent, was plaintiff, and the present appellant, AUGUSTUS LEIDENAUER, was defendant, came before the Court of Common Pleas on the 8th of November. The case had been tried before a jury at Newcastle-upon-Tyne in the month of August, when the plaintiff in the court below obtained a verdict for 50*s.*, and for the purposes of the appeal the facts were admitted by consent, and, having been signed and sealed by the Judge of the County Court, were, as involving an important question, transmitted for the opinion of the court above. By the terms of the charter-party, it had been agreed between the captain and the freighter that the vessel, the *Triton*, should on the first opportunity, and with all possible dispatch after the signing of the charter-party, proceed to the Tyne, and on arrival there be ready forthwith, *in regular turns of loading*, to take on board, by spout or keel, a full and complete cargo of four keels of coals, and the remainder coke. On the day after her arrival in the Tyne, the vessel was duly entered by the freighters on the coal-list, in conformity with the Act 8 and 9 VICT., c. 73, regulating the loading of coal-vessels with coal in the River Tyne. The provisions of that Act are limited to coal, and do not include coke. It appeared that there were two vessels loading with coke, which were entitled to take their turns before the vessel in question, and on the 3d of February last, the *Triton* having taken in her coal, went to the Stanhope and Tyne drop, to take in the coke. Snow having fallen, the passage of the coke to the water's edge was impeded, and the vessel lay waiting her turn till the 11th of March, when she completed her cargo. On the 17th of February the captain protested against the detention of the ship, and the freighters offered to ship the required quantity of coke at another place on payment of 1*s.* more per ton by the captain, which he refused. The action was brought to recover 50*s.* from the freighters, for not having loaded the vessel in a reasonable time, and for her wrongful detention, and for breach of the stipulations of the charter-party in respect of putting the cargo on board. The freighters pleaded, amongst other defences, that the charter-party referred to "*regular turns of loading*," and did not mention any particular time; and that, in fact, the question of reasonable time did not arise in the case. Several questions were raised on the trial, but the following one was the material point. Evidence was tendered on the part of the appellant below, to show that, although there was no Act regulating the terms for coke as there was for coals in Newcastle, yet that it was the custom in that port to

enter a vessel, as soon as chartered, on the freighter's list for her turn, and to load her accordingly, which was done in this case, but the evidence of custom was altogether rejected. The judge of the County Court directed the jury, that under the terms of the charter-party it was necessary that the cargo should be put on board in turn, and left it to the jury to say whether the vessel had been detained an unreasonable time. He directed them that, even assuming that a ship was loaded in her turn, it was no answer to a claim of detention for an unreasonable time, and he gave his opinion that the terms "*regular turns of loading*" meant that the coal was to be loaded first, and the coke afterwards. The Court of Common Pleas were unanimously of opinion that the direction at the trial was erroneous; that, without reference to what might be the ultimate rights of the parties, or how far they might be governed by custom, the simple question was, whether the judge was right or wrong in rejecting the evidence of custom. Newcastle-upon-Tyne is a place crowded with ships, the owners of which are anxious to get cargoes; and as there is an Act regulating coal, it may be assumed that there is some local regulation governing the shipping of coke. The words "*in regular turns*" being ambiguous, or, at all events, sufficiently so to let in evidence as to their meaning, the evidence offered ought to have been received. What that evidence would have proved does not appear, but it must, on the appeal be assumed, that it would have established the custom contended for, because, by rejecting it, the Judge of the County Court held, that if that were proved, it would not have affected the question. The Court were, however, of a different opinion, the words of the charter-party evidently referring to a course of dealing which did not appear on the face of it, evidence was clearly admissible to explain its meaning. The Court therefore directed a new trial, and gave the appellant the costs of the appeal. The principle established by the decision in this appeal is of some importance in the construction of charter-parties, and shows that where the contract of the parties can only be explained by local regulation, that regulation ought to be established by evidence.

In our last Journal we laid before the public an elaborate and well-considered plan which has been proposed for working, by the aid of a high-level railway, the extensive docks of the port of Liverpool. It speaks highly of the public spirit and enterprise of that great commercial town, that its dock accommodation exceeds in area that of London, while the tonnage of London is more than double that of Liverpool. In early times, and with smaller classes of shipping than we now use, convenience dictated wharfs as the spots where goods were to be landed, and the jealousy of our law for rights once acquired, has perpetuated these unsightly appendages along the banks of the river. Their limited accommodation, however, in the course of time forced upon the public the necessity of extending places for the shipping and unshipping of goods, and, in 1796, a parliamentary committee was appointed to consider the best modes of affording accommodation, and they very naturally recommended the construction of docks.

It is remarkable, that all the five great docks of London have been made since the commencement of the present century. The first stone of the West India Docks, perhaps the most magnificent in the world, was laid by the great minister, WILLIAM Pitt, on the 12th July, 1800, and they were opened on the 21st of August, 1802. The first stone of the East India Docks was laid on the 4th of March, 1805, and they were opened for business on the 4th of August, 1806. The London Docks were opened on the 30th of January, 1805; the Commercial Docks in 1807, and the St. Katherine Docks on the 25th of October, 1828. It is rather remarkable that all preceded the formation of railways; and that while railways have been diverging from every quarter upon the City, there has been, with the vast increase of traffic and means of transit, no augmentation of dock accommodation since the latter year. Within that period all the railways have been erected; and statistical authorities assure us that the British and foreign tonnage of the port of London from beyond sea, which was in 1827, 5546 vessels, equal to 990,110 tons, had, in 1851, increased to 10,341 vessels, equal to 2,170,322 tons. It is not, therefore, extraordinary that the value of the several dock stocks should have risen greatly with the increased demand for dock accommodation.

By reason of the extended accommodation which the existing docks have thus afforded, the facilities for loading and unloading have so increased, that the largest vessels that enter those docks, from 800 to 200 tons burthen, have been known to be unloaded in four or five days, and the goods simultaneously placed in the warehouses. This would be deemed miraculous in former days, when six weeks were often required to unload an East Indian of 1200 tons; the goods having to be brought from Blackwall nearly to London-bridge in lighters, there to be thrown on the quays, and then slowly transferred by carts to the warehouses, after multiplied risks, delays, and plunderings. The East India Docks were originally confined to the East India trade; but since the monopoly of the company was abolished, and the trade thrown open to public competition, they have become the property of the proprietors of the West India Docks, and are now open to vessels from all parts.

The locomotive cranes invented by the celebrated RENNIE, by which heavy timber and other weighty articles are transported and deposited in the places appropriated to them, sufficiently attest what may be effected by the superior appliances of modern art. It is supposed that the great docks alone of London have accommodation within themselves for about 500,000 tons of merchandise; and the privilege of keeping articles in bond has tended to render London a free port. To these great docks are to be added some minor ones—the Canal Docks, the Commercial Dock, the Surrey Dock, and the East County Dock; they can altogether accommodate a number of vessels, and, perhaps, under 100,000 tons of merchandise.

This extensive dock accommodation necessarily withdraws a large quantity of shipping from the river; but still it is vastly overcrowded, particularly when we consider the great and daily-increasing passenger traffic upon it. Steam navigation was wholly unknown when the earlier docks were constructed; and it had not attained anything like its present extent when St. Katherine Dock was opened. There is, we believe, in the port of London but little, if any, of the dock accommodation which exists in Liverpool for large steamers; and they are, therefore, still obliged to crowd in the river for the discharge of their numerous and heavy cargoes. As they are becoming on the water what railways are on land—the great carriers of merchandise—provision must be made for them in any new docks to be constructed, as to allow their paddle-wheels to enter without difficulty. It requires no reasoning to demonstrate that even the existing docks—all of which were laid down and in operation before we had become so intimately acquainted with the value and management of railway communication, could be rendered infinitely more available to purposes of general utility, if the plan of running a railway in front of them and along their sides, connecting them with each other and communicating with the quays and warehouses, were adapted to them, as proposed in Liverpool.

The absolute necessity for further dock accommodation in the river is now so sensibly felt, that two projects are before the public for the immediate erection of new docks—namely, that of the Victoria London Dock Company and that of the Wellington Docks. The Victoria London Docks have been already incorporated by Act of Parliament, 13 and 14 VICTORIA, c. 51, and the proposed docks will be situated on the northern bank of the Thames, extending from Bow Creek to Galleon's Reach, known as the Plaistow Marshes, and adjoining the North Woolwich Railway. The works, as authorised, are intended in the first instance to be confined to a dock and tidal basin. The area of water-accommodation will be about 90 acres, with upwards of a mile of quay and wharfage-room, together with 160,000 feet of fire-proof warehouses on a single floor, adapted for the reception of every description of merchandise. It is also intended that the landing jetties and warehouses should be fitted with railways, to communicate with the trunk railways; and it must at once strike the projectors that Mr. GRANTHAM's plan, if adopted in the original laying down of their intended works, will afford them unprecedented advantages.

It is proposed by the other company, as yet only provisionally registered, to construct the Wellington Docks on the south side of the river, in the parishes of Bermondsey and Rotherhithe, on the land now principally occupied as garden-ground, the few buildings thereon being chiefly of an inferior character, the removal of which would tend rather to improve the neighbourhood. They will be close to the Spa-road station of the South-Eastern Railway, and the proposed site comprises 130 acres, out of which it is intended to form import, export, steam, and oilier docks, with a water area of 60 acres, the gates and locks to be capable of admitting the largest steamers, with suitable quays, wharfs, and warehouses. To render this plan also completely effectual, the project of Mr. GRANTHAM appears peculiarly suited, and we refer those who feel interested in both projects for new docks to the details contained in our last Journal. Whatever difficulties may exist in applying the newly proposed system of communication to docks already laid down, as those

at Liverpool, and the five existing docks in London, it is plain that if the suggested improvements be made part of the original plans of construction of the proposed new docks, the advantages which they promise can be secured with much less trouble, and comparatively with far less expense, than their adaptation to the present docks would require.

The broad and busy Thames, the ranks of coal-ships, and the vessels of all sizes, from every quarter of the globe, with the produce of every country are a marvellous sight, and a source of intense astonishment to every foreigner who visits London. His surprise is, however, greater at beholding her docks, with their crowded stores of goods and ships, and the ponderous wagons and numberless barges that convey their weighty materials to the vast warehouses and granaries of the metropolis. The foreigner, on visiting London, is astounded at the dense forests of masts which distinguish the left side of the river, from St. Katharine's to the London Docks; nor is the scene less varied on the right by the unbroken chain of warehouses and wharfs lined with foreign and coasting vessels of every size and class. But if St. Katharine's and the London Docks are remarkable for the number of ships, that enter them, the East and West India Docks are far more distinguished for the size of the vessels to which they are more peculiarly appropriated. It cannot be denied that no other country can boast of such docks as Liverpool and London; Liverpool can alone compete with the metropolis in the extent and magnificence of hers. Being, however, still far behind London in the extent of her trade, it is to be hoped that she will not now be permitted to outstrip us in the progress of improvement, and that the metropolis will start fairly with that great commercial town in the introduction of a system so likely to conduct vastly to the permanent advantage of both. As London has literally outgrown her existing dock accommodation, and as the advance of wealth and population promises to be progressive, any scheme now contemplated ought to look forward to and provide for further and enlarged extension.

There has lately been raised a great outcry against Irish mines managed by English adventurers: from what this arises we are at a loss to know. Some time since the mineral claims of the sister island were advocated, and English capitalists were blamed for not (instead of investing their money in dubious gold-mining schemes) availing themselves of the wealth which was almost lying at their doors. On this hint several adventures were formed, and although we cannot but condemn the parade and ostentation with which some were ushered into public notice, yet we believe that, if efficiently and carefully carried out, a wide field was opened for the employment of British capital, and the development of the capabilities of Ireland. Those who have embarked their money in these adventures have probably forgotten that, although the Irish labourer in thews and sinews can compete with his British compatriot, yet he wants the knowledge and skill, which can only be acquired by practice. It is not to be supposed that a mining population can be created immediately; whether in England, Ireland, or abroad, it requires the training of years. In Cornwall mining has been the pursuit of the inhabitants for centuries. The son of the underground man, previous to his becoming a miner, is a boy at the washing-table, a jigger, a stampman, before he goes underground; hence, by this course of practical education, he becomes a miner. Although eventually this will be the case in Ireland, yet at present, in new undertakings, this is not to be expected. At the Knockmahon Mines, and the other establishments of the Mining Company of Ireland, the Colt has shown that he is ready to receive instruction, and that attained, he becomes as good a miner as his Cornish competitor. In another column will be found a letter from a shareholder in the Knockatrelane Mining Company, which appears highly satisfactory as to the future prospects of the mine; we make no comment on it. We have heard from undoubted authority that shortly the property will be inspected by one of the most eminent mining engineers in the county of Cornwall. A detailed report will then be laid before the shareholders, and, judging from the present indications, we cannot but anticipate that it will prove satisfactory.

At the Society of Arts, on Wednesday, Mr. CHARLES STANSBURY read a paper "On Machines for Pulverising and Reducing Metalliferous Ores," in which he gave a most interesting account of the source of the precious metal, describing every part of the globe from which it had been produced—from the land of Ophir, mentioned in the sacred writings, down to the recent discoveries in California, Australia, and this country. Mr. STANSBURY also entered into a lengthened description of the various methods and machinery used for obtaining gold, fully describing, by diagrams, the rude inventions of the early ages, the simple process adopted at the diggings, and the recent inventions which have attracted so much attention both in this country and America. In the discussion which ensued, Prof. TENNANT, Mr. CALVERT, Mr. COLEMAN, Mr. WOOLMER, Mr. PERKES, and other gentlemen, took part, and our ample report of the proceedings will be perused with much interest. The paper, however, being apparently designed to prove the superiority of BERDAZ's machine, Mr. HARRY CHESTER suggested that the invention be referred to the standing committee of the Society. The Chairman thought if it possessed the merit claimed for it, there was little doubt it would be of great advantage in gold mining, but on the other hand, if the statements were incorrect, the sooner the public mind were disabused the better. Mr. STANSBURY, on behalf of Mr. BERDAN, willingly accepted the offer, and in order that it might be fairly tested, would place the machine under the sole control of the Society, to make the necessary trials in the absence of any person interested in it, feeling satisfied the result will be more conclusive than by the small quantity of ore usually given to assayists.

**ISTHMUS OF DARIEN.**—We understand the most gratifying intelligence has been received respecting the progress about being made in perfecting Sir Charles Fox's plan for crossing the Isthmus of Darien. The English Government is to lend the most ample assistance; America has promised its entire co-operation; and Sir Charles Fox is now in France, in full expectation of obtaining the approval and patronage of the Emperor.

**GREAT CAMBRIAN MINING AND QUARRYING COMPANY.**—In the usual place we have inserted the report of the manager of this company to the board, and, great as the interest which we know to be felt as to its progress, we regret we should have to state that the machinery cannot be completed within the time originally contemplated; and as, from private information, we believe there is a very large quantity of ore upon the surface, we are more regretful on the part of the shareholders, that this delay has so unavoidably occurred; but that the directors and officers connected with the company will do their best to expedite the erection of the machinery we have no doubt, and should it be found necessary to postpone the first general meeting of the company until the month of February, instead of January, as originally intended, we feel certain that the directors, should they deem it advisable so to do, will be justified by their proprietary in taking such a course, but at the same time we hope, for the interest of all parties, that the directors will be able so to arrange matters as to summon a general meeting for the third week in January, and should they not be then in a position to declare a dividend, they will no doubt be able to lay before the meeting such a statement of facts as will be equally pleasing to the shareholders.

**MIDDLESBOROUGH AND GIBBOURGH RAILWAY.**—This line was opened for mineral traffic on Friday, the 11th inst., the day being highly propitious, several hundred people assembled to do honour to the occasion. Long before the hour specified, masses of human beings might be seen wending their way to the far-famed Codhill, where the iron-stone mines are in operation. An engine, with six carriages attached, containing the directors, shareholders, and friends of the undertaking from Darlington, etc., arrived at a few minutes to ten A.M. at the Codhill branch, and after proceeding some short distance up the line to Codhill the party got out, and walked in procession up to the iron-stone mine. On arriving at the extremity, a quantity of iron-stone was transmitted down the line of railway in wagons, the people giving three times three vociferous cheers. A very substantial refreshment, consisting of the old English fare of roast-beef and plum-pudding, was provided at Mr. Ralph Robinson's, Hutton Hall, for the workmen employed at the works and on the line. After inspecting the mines the party returned to the railway train, and were conveyed to Gibborough, depositing at the depot several wagon-loads of coal and lime. On the arrival of the train at Gibborough, at twelve o'clock, a luncheon was provided at the Town Hall, when about 100 gentlemen sat down to an excellent repast, supplied by Mr. Henry Watson, of the Cook Inn. In the evening, and during the afternoons, various recreations and other amusements took place, which concluded a most agreeable day, long to be remembered in the annals of Gibborough.

**STOCKPORT, DILSEY, AND WHALEY BRIDGE RAILWAY.**—A company has just been formed, and provisionally registered, under the above name, for the purpose of constructing a railway to accommodate the populous district between Stockport and Whaley Bridge, taking in its route Hazelgrove, Dilsey, and New Mills, joining the London and North-Western at Stockport, bringing the whole in direct communication with Manchester. The proposed line will incidentally accommodate the large space lying between the Midland Railway on the east, and the North Staffs-Lake District, and other places in the Derwent Valley, and Buxton, Ashford, and Bakewell in the Peak Valley. The length of the line required to effect these objects is only ten miles, and will be constructed under most favourable circumstances—the landowners of eight-tenths of the line having actually agreed with the committee to take agricultural value for their land. The capital proposed is £30,000, in 7500 shares, of £1 each, upon which 2*d*. deposit is to be paid. The committee is composed of highly respectable and influential gentlemen resident in the neighbourhood, who are already in friendly negotiation with the London and North-Western Railway Company for traffic and working arrangements.

#### THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN BIRMINGHAM.]

Nov. 24.—The principal topic of conversation in the Iron Trade is the Decree of the French Government authorising the importation of iron and coal into France at a reduced tariff. Although the reduction is not so great as was anticipated, and we have not yet had time to analyse minutely the reduction in all its bearings, sufficient is known to induce the belief that it will very materially benefit the trade of this country, and South Staffordshire in particular. This alteration in the French duties, coupled with the prospect of a similar measure in America, and recent large orders for rails from the latter quarter, has given a still further stimulus to the trade, and prices, it is needless to say, remain firm. Indeed, it is difficult to say the extent to which mining operations in this district may not be carried. In full expectation of an extraordinary development of our mineral resources, the large capitalists, through the medium of their respective companies, are preparing for most extensive means of transit by rail and water through this and the adjoining county. The Birmingham Canal Company, one of the oldest, and most intimately connected with mineral property, have given notice of application to Parliament for leave to cut several new branches and make new tram lines over a great extent of country, in order to meet the requirements of the iron and coal masters; whilst several railway companies, including the potties, Biddulph and Congleton, the Congleton and Biddulph Valley, the Great Western and Shrewsbury and Birmingham and Shrewsbury and Chester, the Cannock, the Severn Valley, the Derbyshire and Staffordshire and Worcestershire Junction, the Montgomeryshire and Rea Valley, the London and North Western, and the Great Western Stratford Line Companies, are making arrangements for affording still further means of communication throughout the district. And in connection with this subject may not appropriately be noticed the intended opening, on the 1st of December, of the Oxford, Worcester, and Wolverhampton line to its final terminus, at Wolverhampton. This arrangement is officially announced, and will, no doubt, be attended with great advantage to the densely populated mining country through which it passes. Add to this the increased accommodation which this line will afford, the fact that it may be said to have inaugurated the railway mania, to so many, the cause of misery and happiness, and no small interest attaches to the completion of the undertaking. It is also satisfactory to know that in proportion to the extra demand anticipated for iron, the means of supply are forthcoming. Exclusive of an average quantity of ore from the ordinary sources, a large field is now opened on the Mulgrave estate, near Whitby, belonging to the Marquis of Normanby. There is an immense seam running along the cliffs facing the German Ocean, and said to be from 8 ft. to 15 ft. in thickness, and of exceeding rich quality, all of which is now offered to the trade. So far, therefore, the prospects of this important branch of national industry and commercial enterprise, from whatever point it may be viewed, is very satisfactory.

It is to be regretted, the same cannot be said of the Copper Trade, and all those dependant upon it. Another advance of 9*d*. per ton, said to be the result of improper speculation, has just been declared, in circulars from the metal dealers, of which the following is a copy:—"An advance of 9*d*. per ton has this day taken place, and prices are as follows:—Tin ingot, 12*lb*; tough ingot, 12*lb*; tough cake, 12*lb*; best selected, 13*lb*; brazer sheets and sheeting, 1*s*. 2*d*. per lb." The result of this announcement, although only made within the last few hours, is very unsatisfactory, and will, I am given to understand, lead to the suspension of some large orders for manufactured goods. As to the effect upon the "small" masters, it must be serious indeed: many of them will be obliged to stop working.

In the Tin Trade, there is no change reported this week, but the tendency is rather down. Relative to the general trade of this town and neighbourhood, the reports are satisfactory. In nearly all branches of general hardware there is a brisk demand, and both masters and men are well employed at remunerative profits and wages, thoroughly regardless of either Czar or Sultan.

#### MODIFICATIONS IN THE FRENCH TARIFF ON COAL AND IRON.

The full particulars of the modifications in the French tariff, just received, enable the following explanation to be given:—Coal formerly paid a duty of 4*s*. 7*d*. a ton, when imported by sea from Dunkirk to Sables d'Olonne, in the department of Vendée. This is now reduced to 2*s*. 9*d*. The former duties of 2*s*. 9*d*. a-ton when imported between Sables d'Olonne and Bayonne, and 1*s*. 4*d*. when imported by the Mediterranean ports, have been consolidated at the lower charge. The duties on importation by land, varying from 1*s*. 4*d*. to 1*s*. 0*d*. per ton, have been retained. Coke formerly paid twice the duty on coal; now it only pays one-half more than the reduced duty. These are the duties by French ships. By foreign ships they are higher; but, as English ships employed in the trade between France and England have been since 1826 assimilated to national ships, the distinction is of no practical importance to this country. This being the case generally, it will only be necessary, as regards iron, to place the former duties in comparison with those now to be paid on importation by French vessels, English vessels being in the same category:—

	Former duties,	Duties, per ton,	After Jan. 1,
	per ton.	till Jan. 1, 1855.	1855.
Pig-iron .....	£2 15 6	£2 4 0	£1 15 4
Iron in bars, accord-	£ 6 12 0-8 4 10 ..	5 5 10-7 0 10 ..	4 8 0-6 3 4
Rails, the same as iron bars,	according to dimensions:		
Iron plates .....	17 12 0	11 0 0	8 16 0
Steel, in bars. Cast ..	26 8 0	17 12 0	13 4 0
Wrought 52 16 0		17 12 0	13 4 0

From these details, it will be easy to estimate the importance of the step taken by the French Government, the advantages it is likely to confer on that country, and the influence it will exercise on the trade with England. It will be seen that, although some of the anomalies of the former system remain, and the duties are still very high in several cases, a sensible and practical step has been taken in the direction of unrestricted intercourse. The importation of English coal into France is large at this moment, and employs a great number of vessels of both countries. It is likely to be much promoted now, and English coal reaching Rouen, Dieppe, or Boulogne, will only pay a surtax of 1*s*. 4*d*. over Belgian coal, instead of 3*s*. 2*d*. as before, and will be able, therefore, to reach further into the interior before being undersold by it—perhaps, as far as Paris, if the French Northern and Paris and Rouen Railway Companies are enabled to convey it profitably at a cheap rate. At present English iron is little consumed in France; henceforth it is likely to be used to a large extent in Normandy and the western parts, which are remote from the French iron districts, especially after the 1st of January, 1855, when the further reduction will come into operation. The duty on rails will still be very high. The reduction of the duty on steel is considered more likely to promote imports from Sweden than from this country.—*Times*.

**NEW IRON-WORKS IN LIVERPOOL.**—There is now in course of building at Harrington-street Potteries, an extensive iron manufacture, in connection with the Mersey Steel and Iron Company's Works, Sefton-street, known as the Forge. It is stated that this new establishment, which will be principally set apart for rolling iron, will afford employment for nearly 300 men. The works are to supersede those now in operation in Mersey View-street, where all the heavy portions of machinery are produced—such as shafting for large marine engines. It was at this place that the immense swivel gun was manufactured for the American frigate, *Princeton*, in lieu of the one which burst. Some idea of the extent of the business done at this establishment may be gathered from the fact, that eight large engines are, day and night, with the exception of Sunday, continually at work. The works are the property of the Messrs. Horsfall, brothers to the Member for Liverpool.—*Liverpool Mercury*.

**IRONSTONE IN SCOTLAND.**—Several extensive fields of ironstone, especially of the most valuable descriptions of the blackband, have recently been developed in the Middle Ward, and in the adjacent portions of the county of Linlithgow. Among these are a valuable field on the estate of Moushog, Shotts, belonging to Mr. Forrest, of Treebank; another not far distant, on the estate of Blackhall, Cambuskenneth, the property of David Bell, Esq., of this city; and a third on the lands of Murdiston, belonging to Mr. Baile Cashmore. The Moushog minerals have been leased to the Sheet-Iron Company, the s of Blackhall to Messrs. Merry and Cunningham, and those on Murdiston to Robert Stewart, Esq., of Ormes, Lord Provost of Glasgow.—*North British Mail*.

**A NOVEL COMBINATION OF METALS.**—MESSRS. Morewood and Rogers have taken out letters patent for their improvements in plumbic-zinc, a material of modern introduction, combined, as the title implies, of a layer of lead and zinc. Although to architect and builder in this country plumbic-zinc is comparatively unknown, the colonies appear to have readily appreciated its many qualities. At Victoria alone, after practically testing its merits, the Government, for the improvement of that city, entered into contracts to an immense extent, and upwards of 200 tons have already been shipped from the Steel-yard, Thames-street, and as the local journals state, arrived safely in Victoria. Its durability, toughness, and economy are remarkable, and the purposes to which it is applied seem innumerable.—*John Bull*.

**GAS BY ELECTRICITY.**—MR. C. E. Shepard, of Onslow-square, Brompton, the inventor of the machine for the production of hydrogen gas by electricity, had the honour of exhibiting his experiments, on Friday week, before the Emperor Napoleon and Empress in Paris. Mr. Shepard, who is the author of *Practical Electricity*, has just been honoured by a present from the Sultan of a splendid diamond ring.

#### WEEKLY LIST OF NEW PATENTS.

##### APPLICATIONS FOR PATENTS, AND PROTECTION ALLOWED.

T. Clare, jun.: Construction of iron houses, vessels, &c.—J. Crowley: Preventing collisions on railways.—P. Lipcombe: Steam-power, and regulating same.—W. Wood: Abstracting and consuming smoke, &c.—J. H. Tuck: Motive power, and for raising liquids.—G. Nasmyth: Steam-boiler furnaces.—W. Hindman: Steam-boilers, and fixing the same.—W. G. Ginty: Manufacturing of combustible gases from water, &c.—W. Croslan: Governing speed of engines.—W. Rackster: Buffers.—W. E. Newton: Machinery for crushing ores.—J. H. Johnston: Malleable iron manufacture, &c.—J. Smith: Millstones.—J. Harrison: Steam-engines.—C. Carrand W. K. Horsley: Steam-machinery and pumps for mines, &c.—R. W. Jerrad: Steam-boiler furnaces.—W. B. Johnson: Steam-engines, and pressure indicators.—E. Kosterlow: Springs for carriages.—H. Pershouse: Deposition of metals.—J. Grindon: Steam-engines.—H. Wiglesworth: Coupling railway carriages.—R. Roughton: Steam-boiler, &c.—T. Walker: Railway signal apparatus.—J. Gardner and W. W. Wynne: Gas stoves.—H. Chamberlain: Brick tubes and tiles.—B. Dangerfield and B. Dangerfield, jun.: Steam-boilers.—T. Dunn, J. Bowman, and J. Dunn: Machinery for raising, &c., heavy bodies.—J. Brown: Coke ovens.—W. Dicks: Wheels for carriages.

##### WEEKLY LIST OF PATENTS SEALED.

G. Spener, Manor-road, Walworth: Improvements in springs for carriages.—G. K. Douglas, Chester: Certain improvements in the permanent way of railways.—J. Perkins, Manchester: Improvements in the manufacture of oils.—W. Hall, Colliery, Castlecomer: Improvements in conversion of peat into charcoal.—G. Spener, Cannon-street, west: Improvements in supporting rails of railways.—S. Smith, Hyson Green-Works, near Nottingham: Improvements in governors for steam-engines.

J. L. Stevens, King William-street, City: Improvements in grates and stoves.—J. G. Lynde, jun., Great George-street: A pressure governor or self-acting apparatus for regulating the flow of water.

R. Laming, Millwall, Poplar: Improved process for purifying gas.—W. E. Newton, Chancery-lane: Improved machinery or apparatus applicable for pumping water, and supplying steam-boilers with water, and maintaining the water therein at a proper level.

A. E. L. Belliford, Castle-street, Holborn: Improvements in rotary engines, to be driven by steam or any vapour, fluid, or gas; and in boilers or generators to be used in generating steam or gas for driving the aforesaid or other engines, or for other purposes.—Also, for improvements in navigable vessels, to be employed in all waters, and to be propelled or impelled by sails, steam-power, or other means.

T. L. Dimdale, Kingstown, near Dublin: Improvements in purifying coal-gas, and disinfecting sewage or other foetid matters, and absorbing noxious gaseous exhalations.

J. W. Cochran, Gower-street: Improvements in machinery for crushing, grinding, and pulverising stone, quartz, or other substances.

**SCREW-JACKS.**—MR. GEORGE ENGLAND, engineer, of the Hatcham Iron-works, New-cross, has patented an invention which relates to an improved construction of traversing and elevating screw-jacks, and consists in actuating the elevating screws of such screw-jacks by means of combined bevel and spur gearing. To effect this object, a bevel wheel is formed upon the actuating nut, which is acted on by a second bevel wheel, which has a spur-wheel formed upon it; a spur-pinion is made to gear with the spur-wheel, and is employed when great power is required. The actuating winch-handle may be fitted either on to the arbor of the second bevel-wheel, when a quick motion is required, or on to the arbor of the small spur-pinion when it is desired to obtain a powerful lift. The jack is traversed laterally by a horizontal screw, or by a rack and pinion acted on by a ratchet handle.

**HOT-AIR FURNACE.**—MR. NEWTON, C.E., of Chancery-lane, has patented some improvements in hot-air furnaces for heating buildings, some of which improvements are applicable to other furnaces.—Claims: 1. The method of supplying heated air for the combustion of the inflammable gases evolved from the fuel through apertures in a plate, or other equivalent or suitable contrivance, placed within the fire-pot or chamber, and made to discharge jets of air into the space through which the products of combustion pass. 2. Making such air-supplying apparatus moveable and adjustable within the fire-pot or chamber, for the purpose of adapting it to the varying height and condition of the charge of the fuel, so as to effect the economic combustion thereof, as specified. 3. Making such air-supplying apparatus in two parts. 4. Forming the flues for the heating of the air, by means of flanches projecting from, and forming part of, the outer surface of the fire-pot, and enclosed by a surrounding wall. 5. Causing the air to pass through small apertures in a flanch projecting from the outer surface of the fire-pot, as a means of imparting heat by conduction to the air, when subdivided into small streams. 6. Discharging the heated air into the hot-air chamber or chambers through minute apertures, as a means of increasing the velocity of the discharged air, and ensuring a more rapid circulation of air through the flues, and to the apartments to be heated. 7. Dividing the hot-air chamber into two or more compartments, by means of partitions provided with apertures governed by dampers or valves, for the purpose of regulating the supply of air to separate parts of a building.

**ARTIFICIAL STONE.**—MR. E. BARRETT, sculptor, of Ipswich, has patented some improvements in the treatment of natural and artificial stone, and of articles composed of porous cements or plaster, for the purpose of hardening and colouring the same. The inventor introduces the liquid indurating substance into an exhausted chamber containing the stone to be indurated, the liquid substance being previously heated to a temperature of about 50° or 60° Fahr. When the stone requires to be coloured, the colour is laid on with a brush, and allowed to dry before the indurating process is commenced. The mixture employed by the inventor for indurating stone is composed of 56 parts, by weight, of sulphur, dissolved by the aid of steam or dry heat, and 44 parts of dilute vinegar or acetic acid, containing 17 parts of acid to 8 of water. In preparing indurating mixtures to be applied to the exteriors and interiors of buildings, whether the surface be of brick, stone, cement, or plaster, he employs—Mixtures 1. 14 parts, by weight, of shellac, 14 parts of seed lac, 1 part of coarse turpentine, and 40 parts of pyrolygous spirit.—2. Gutta percha dissolved in castor-naphtha, or other suitable solvent, in the proportion of 3 parts, by weight, of gutta percha, and 8 parts of the solvent.—3. 1 bushel of limestone or chalk, 12 gallons of water, 12 lbs. of alum,  $\frac{1}{2}$  gallon of beer grounds, and  $\frac{1}{2}$  gallon of gall, well mixed together. These solutions, when heated, are to be laid on with a brush until the surface will absorb no more.—Claim: The above means, or any mere modifications thereof, for hardening and colouring natural and artificial stone, and articles composed of porous cements or plaster.

## SOCIETY OF ARTS—REDUCTION OF AURIFEROUS ORES.

The second meeting of the session was held at the society's house, John-street, Adelphi, on Wednesday evening—Mr. THOMAS HORSEY, F.R.S., in the chair.

Mr. FORSTER (the secretary) read the minutes of the previous meeting, which were confirmed.

There were placed on the table several elegant models of Mr. Berdan's machine, as also the gold procured from the gossan of the Poltimore Mine, reduced by Messrs. Rawlinson and Watson, of St. Helen's. A number of specimens from Mr. Calvert's collection were also produced.

Mr. CHARLES F. STANSBURY then read a paper "On Machines for Pulverising and Reducing Metalliferous Ores," from which we extract the following:—

Before proceeding to discuss the more prominent means now in use for extracting the noble metal from the substances with which it is found associated, it will be well (very briefly) to consider the conditions in which gold presents itself in the various localities where it is found.

It has often been remarked, as an evidence of the wise care of Providence, that while gold, which possessed a comparatively artificial value, existed but in small quantities and in few localities, from the most useful of metals, was distributed in vast quantities in every quarter of the globe; and was everywhere accessible to man. The present appearance of things would seem to throw some doubt over the truth of this remark, which would appear to be more plausibly than just. The fact is, that gold is found in every quarter of the world, and every day's research opens new fields to the enterprise of the gold-seeker. The author of a year on this subject is already out of date. California, whose gold fields were opened only six years ago, had hardly successfully asserted its claim to the title of the El Dorado, before she found a powerful rival in your own Australia; and even this seems destined to share attractions with Devonshire and Wallasey.

The most ancient source of the precious metal mentioned in the sacred writings is "the land of Havilah, where there is gold," and of which it is said "the gold of that land is good." Of Ophir we are told that "they fetched from thence gold and brought it to Solomon, and that "Jehosaphat made ships to go to Ophir for gold;" but we know not with certainty the situation of Ophir; nor have we the means of ascertaining in what form the metal presented itself, or whether the diggers of those ancient days reduced it by means of crushers, crucibles, or long-toms.

In later times, Africa was long a noted source of gold, which gave a name, indeed to a large portion of its coast. The metal was found in small particles, known in commerce as "gold dust," collected, no doubt, by some rude process of washing, from the sands in the beds of the intermitting streams. The region on the south of the Sahara, also Sofala and Kordofan, were prolific sources of the precious metal. Sofala has, indeed, been some supposed to be the ancient Ophir, and was long the chief emporium of the gold brought from the interior. But Africa is now entirely eclipsed by our modern El Dorados.

Asia has long been, and still continues to be, an important source of gold; indeed it was brought from the Indian Islands in remote times, and more recently gold deposits have been extensively worked in the Siberian and Urals districts. In the Ural it is found in small pieces, embedded in coarse gravel, and in veins of quartz, and is usually associated with platinum.

America, too, has made her full contribution to the stock of the noble metal. Brazil, Chili, Peru, Ecuador, New Granada, have all yielded rich supplies. The streams which run from the mountains bring down their precious freight in their pebbly beds. These were for a long time the chief sources of Brazilian gold, but it is also found in veins in the rock, which modern capital is making available and profitable.

The quantity yielded in Mexico is comparatively small, and is always found there associated with silver.

The Alapalachian chain of the United States sends down in some of its streams quantities of auriferous deposits, which have been worked with advantage in Virginia, the Carolinas, and Georgia.

But all the gold-fields of America sink into comparative insignificance before the immense yield of the single state of California; which, in six years, has transformed a wilderness into a populous and wealthy state, with agricultural arts, and commerce. The gold discoverers here took the usual course. It originated in accident, got wind against the will of the first discoverers, was kept alive by rich findings in alluvial deposits, and at last subsided into something like a regular branch of industry, into which more perfect methods were introduced, as the eagerly-sought wealth began to demand for its attainment a more steady and laborious industry. Rich sands and muds give place to quartz ore, which required to be mined with great labour—crushed by heavy machinery, and augmented by careful and expensive processes.

In Europe, gold is found in many localities; the principal of which are Hungary and Transylvania. But England and Wales seem, from recent events, to bid fair to take their place among the most important gold-producing countries of the world. The precious metal occurs here in state of minute division in quartz rock. In Devonshire the red and brown gossans contain a percentage which will amply repay the cost of reduction, by the best methods now known. The following statement of the result of eight recent experiments with some auriferous quartz from Merionethshire, Wales, will show the grounds of the opinion above expressed:—

Oct. 23.—362 lbs. yielded 151 grs., at the rate per ton ... 1 oz. 19 dwt. 17 grs.
98 lbs. ... 66 grs. ... 3 2 20
25.—320 lbs. ... 135 grs. ... 2 0 6
75 lbs. ... 31 grs. ... 1 18 14
Nov. 7.—166 lbs. ... 72 grs. ... 1 18 0
196 lbs. ... 222 grs. ... 5 17 17
11.—748 lbs. (lead) ... 204 grs. ... 1 16 18
11.—748 lbs. (pyrit) ... 173 grs. ... 1 15

The Briton gossan, from Devonshire, yielded by recent experiments:—1.  $\frac{1}{2}$  ton produced 7 dwt.—14 dwt., to the ton; 2. 1 ton produced 1 oz. 0 dwt. 20 grs.; and from the Arundell United Mines, 2 ows. 2 dwt. 11 grs. to the ton. A specimen of Cornish ore yielded at the rate of 11 ows. 13 dwt. 8 grs. to the ton. The Poltimore gossan has yielded from 17 to 32 dwt. to the ton, and other Devonshire ore 9 ozs. to the ton. These results have been obtained within the last month, and go to show that the long-cherished dream of finding gold in profitable quantities in England is about to be realised. The experiments just mentioned have all been made at an expense not exceeding 5s. the ton for the reduction. The same ores have formerly been smelted at a cost of 30s. per ton.

A word on the subject of England's great gold-producing colony will conclude these hasty preliminary observations.

Australia has only been known as a gold-producing country since 1851; for although shepherds and others were known to have picked up stray pieces of gold-bearing quartz for some years previously, it was not suspected to exist in quantities sufficient to repay the labour of collection, until Mr. Hargreaves, a practical miner, who had gained his experience in the Californian gold-fields, showed that the metal could be obtained in large quantities on the western slopes of the Blue Mountain Range. Subsequent researches have proved the metal to exist in larger or smaller quantities throughout the settled districts of South-Eastern Australia; and, from the character of the ranges to the north of New South Wales, it is suspected that they will prove equally prolific. Hitherto the metal has been obtained solely by the simple process of washing; but, for although machinery has been introduced by public companies for the purpose of extracting it from the quartz rock, no important results have yet been attained. Indeed, in the first instance, the metal appears to have been sought only in the alluvium, until the discovery of a monster nugget, consisting of nearly 1 cwt. of gold, in a quartz ridge near Bathurst, called attention to the parent rock; and the subsequent researches of the Government geologists brought to light veins of auriferous quartz, so extensively diffused that quartz mining must soon become one of the chief industrial employments of South-Eastern Australia.

Notwithstanding this extensive distribution of gold, and the great desire of man to become possessed of it, the methods which human invention has hitherto devised for the purpose of obtaining it have been but partially successful. There is abundant evidence to show that, up to the present time, no method that has been applied has succeeded in extracting all the precious metal from auriferous ores. A friend of my own, who has travelled extensively in Russia, states that a very large proportion of the wealth of the Russian ores is lost—by confession of the miners themselves—in the process of reduction now employed, and which has been cited by an eminent geologist and mining engineer, as the most perfect process now in use.

In California, too, the loss of gold has long been loudly complained of. Mr. Collins, of Grass Valley, in that state, says:—"Our present mode of operating is very rapid, but the process of saving the gold is very imperfect, not saving from ordinary rock more than one-fourth or one-third of the gold which it contains."

The Phoenix Gold Mining Company of New York, in their report, make the following remarks:—"The difficulty hitherto in gold mining from quartz has not been chiefly in breaking, grinding, and pulverising the rock—that is in itself a very simple process, and one which can be effected in a variety of ways, with a percentage of difference in rapidity; but, after the rock is pulverised, the great desideratum is to separate the whole of the gold from the powder. The old process is so incomplete in its results that not more than one-sixth of the gold is saved in practice, as shown by the more thorough assay of the chemist." We might add volumes of evidence on this subject, all of the same tenor, but the simple fact that there has been so much inventive ingenuity applied in the last few years to the production of machinery for extracting gold from its ores, is sufficient to show that a machine for the purpose of doing this work effectively remained a desideratum.

This leads us at once to the consideration of some of the methods hitherto employed for this purpose. The processes for securing gold may be divided mainly in washing, smelting, and amalgamation. Of washing, that of panning may be considered the type; in another apparatus the hide of animals, with the hair on, and turned against the course of the water, is employed to secure the fine auriferous particles as they find their way to the bottom of the stream. The holes are occasionally washed with raw, and feed from their previous load by washing in proportionate. The process of smelting will not be alluded to in the present paper, inasmuch as it is evidently not applicable to the general wants of the gold-seekers of the present day, because it requires means and appliances not within their reach. Next in order we come to consider the method of amalgamation, which is the one most relied on by practical men for securing the desired product. The process of amalgamation involves, of course, the previous reduction of the ore to a finely divided state, in which alone the mercury can seize upon the gold and secure it. The question between the machines hitherto invented is simply one of the quantity of work done with a given amount of power. In California the principal ones in use have hitherto been the Mexican arrastras and the Chilean mill. Rollers are sometimes used for crushing and reducing to a powder; the objection is that they do not crush the ore sufficiently fine. All machines which can short of producing an impalpable powder may safely be considered as failing in the most essential requirement for securing all the gold from the ore: the qualities which a perfect gold ore-reducing apparatus it is thought should possess are: 1. It should grind the ore to an impalpable powder, in order to which it should have a combined rolling and rubbing action.—2. It should amalgamate at the instant of crushing.—3. It should amalgamate at the point of crushing, or below the surface of the mercury, which must be kept constantly at the crushing point.—4. It should heighten the affinity of the mercury for the gold by the application of heat.—5. It should lose no mercury in the process.

The only method which seems hitherto to have answered all the five conditions necessary to amalgamating apparatus is what is called at the diggings the miner's assay. In this process the mortar and pestle are employed: mercury is put in the mortar, the ore to be tested is thrown in and covered with hot water, when the operation begins. On a large scale, the cost of heating sufficient water to attain the result here indicated would of course be a great practical difficulty. Those who have seen Mr. Berdan's machine will at once perceive that it embraces every principle of the miner's assay, while it avoids the expensive process of heating water in large quantities.

Mr. Stansbury concluded by giving a full description of Mr. Berdan's machine, which has already appeared, with illustrations, in the *Mining Journal*.

Professor TENNANT expressed his regret that he was not competent to give an opinion upon Mr. Berdan's machine, more particularly as the opinions he had heard elsewhere had been rather unfavourable to its merits when brought into practice. He had not, however, had an opportunity of seeing it in operation, and, therefore, as he had already intimated, could not give a decided opinion upon its capabilities. There was, however, an impression upon the public mind for which he thought there was no positive

foundation. It was said by some enthusiasts that we are to have a California in England. Such statements, however, were in his opinion fallacious, no instance of auriferous ore ever having been productive of profit in this country. In every case which had been attempted to procure the precious metal it had cost 30s. to 40s. to get 1s. worth of gold, and, in every instance in which he had gone fully into it had been a very unproductive speculation. Undoubtedly, gold existed in this country, and also in Ireland, Scotland, and Wales, but under very different circumstances to those in which it was found in California and Australia; there they had nothing more to do than to crush the ground; but even in that country he knew of no company that was paying a dividend from the production of gold obtained from quartz. Under these circumstances, the opinions of those who entertained a belief that gold could be produced in this country at a large profit ought, he thought, to be received with caution.

Mr. MOORFORD, of the Poltimore Company, had seen a great quantity of the ore from that company's mine tested by Mr. Berdan's machine; and the result had been, that the per centage of gold produced had equalled that of any of the foreign mines. The brown gossan had yielded 13 dwt. to the ton, and the red gossan 32 dwt. This was produced at a considerably less expense than they had been able to obtain it under a different process, which had been tried at Liverpool, where the expense of freight, &c., had been about 2*l*. 10*s*. an ounce; but, notwithstanding these heavy expenses, it had realised a profit of 1*l* 10*s*. or 1*l* 1*s*. on 120 tons. Now, if the company engaged Mr. Berdan's machine, they would be able to produce the same quantity at 1*l* 10*s*. per ton, if not for less. He had no doubt that in the course of twelve months many gold companies would be established in this country, and that it would be shown that gold could be profitably produced in England; if would, therefore, certainly be a gracious thing on the part of the Crown, and an encouragement to industry, for the Government which was of feudal origin.—Mr. MOORFORD is in error respecting the Crown's right to participate in the discovery of gold; on referring to the Journal of Nov. 12, he will see a Decree of William and Mary, by which the Crown withdraws from any pre-existing claim to gold, when discovered in connection with tin, copper, iron, or lead.

The CHAIRMAN said they could only discuss that question with the Chancellor of the Exchequer. He wished to know the cost of bringing the Poltimore gossan to the Exchequer?—Mr. MOORFORD said about 3*s*. per ton.

Mr. PERKES said they had had a great many inventions brought from America which when tested turned out to be of English origin. This machine of Mr. Berdan's was an English patent, and he had given Mr. Berdan notice that it was an infringement of his (Mr. Perkes') patent. It was said that the pins and balls were void of friction; but he (Mr. Perkes) contended there was very great friction. It was stated that the machine worked at 150 revolutions per minute—such a statement he pronounced to be a positive falsehood; the average working had only been 20 revolutions per minute. If done at 150 per minute, the waste of gold would be enormous, an considerable quantity would be washed over the pan; therefore it would be seen that they had not the most perfect machine. He had a machine which he would challenge against the world, the working models of which would be complete in a few days, and he would be happy to show them to any gentleman who meant business. (A laugh.) With regard to Professor Tennant's remark, that hitherto 4*s*. had been the cost of procuring a pound's worth of gold, he (Mr. Perkes) should be able to show that it could now be reduced at 5*s*, or even 3*s*. 6*d*. per ton; and the time was not far distant when it would be seen that we have as good gold-fields in England as are to be found in California or Australia.

Professor TENNANT explained that gossan could be easily crushed at a very small cost, but it was different with quartz.

Mr. COLEMAN observed that he was not a scientific man, but he had taken some interest in the reduction of ores, and in Mr. Berdan's machine, in consequence of a report he had seen in the *Mining Journal*, and also in consequence of an advertisement of Mr. Perkes, which appeared in the last Number of that publication. So far, however, as Mr. Perkes' machine would affect Mr. Berdan's the latter had shown him (Mr. Coleman) a correspondence, which satisfied him that Mr. Perkes must have a very poor case indeed. If he had not, he would at once put down Mr. Berdan's machine. Mr. (Mr. Coleman) had just returned from Wales, and would give them the fact that there was at this present moment a mass of quartz rock there. He wanted to see something tangible—something visible before him, and had this day put in a quantity of quartz in Mr. Berdan's machine, which had yielded 1*l* 1*s*. of gold to the ton. The St. John del Rey Mining Company had never produced more than  $\frac{1}{2}$  oz. to the ton, from which they paid dividends at the rate of 25 per cent.; and the Imperial Brazilian Mining Company, whose records were regularly published in the *Mining Journal*, gave only 2 dwt. to a ton. He had seen a gentleman connected with the office of the latter company whether 2 dwt. to the ton would pay, and his reply was that they would be very well satisfied with such a produce. When, therefore, they heard that 1*l* 1*s*. of gold had been obtained from a ton of ore, the produce of a mine in this country, there could be but little doubt that the ore of gold in England was equal to the products of foreign countries. He merely made these observations in answer to Mr. Perkes and Prof. Tennant's observations; and he (Mr. Coleman) believed that gold did not only exist in England, but in Ireland, Scotland, and Wales, where the same geological character of the stratum existed. He had watched the operation of Mr. Berdan's machine very attentively, and although there was no gold visible to the eye, when the ore was placed in the machine, it soon became apparent after going through the process to which it was submitted.

Mr. PERKES begged to set himself right with regard to the observations of Mr. Coleman. The reason why he had not been taken out was, that there were some portions of the invention claimed which he (Mr. Perkes) could not disclaim.

Mr. WOODWARD attended at the request of some parties interested in a mine in Devon—the Arundell Copper Mine. They were very much indebted to Professor Tennant for putting them on their guard; but it was the intention of their company to see whether the mine was worth working for gold; and for the purpose of testing the question, they would not be satisfied with an experiment on a small scale, but would send up 10 tons of muriatic at their own expense, and he would put it to Professor Tennant whether that quantity would be sufficient to settle the question, which he was most desirous should be fully and fairly investigated.

Mr. PERKES intimated that 5 tons would be amply sufficient for that purpose.

Mr. CALVERT said that since his return from Australia he had turned his attention to this important subject. He had found the geological positions favourable for gold in England, and had tested upwards of 300 specimens. He had not found richer specimens in other parts of the world than he had in this country. But a scepticism prevailed; parties were against the opinion that it was to be met with in large quantities here, because they live here. He was, however, of opinion that the gold ores of England were far more important than the gold of Australia. The specimens before the meeting were equal in quality, and in fact, precisely the same as those found in other parts of the world. In a very short time he hoped to see the gold mines of England fully developed; and, however sceptical parties might be as to the result, he had no doubt that ore would be produced that would yield from 5 to 6 ozs. to the ton. It was an astonishing fact that we had been blundering on for so many years without the aid of proper machinery; but he had great hopes that with the machinery coming before the public it would be seen that his opinions would be confirmed. Time would show. It had been the study of his lifetime, and he only asked them to wait for a very short time, and they would see what he had stated developed.

Mr. HARRY CHESTER trusted the public would give full attention to the warning of Prof. Tennant, as to the existence of gold mines in England. The practical suggestion he wished to offer, as the subject was of great interest and importance, was that it be referred to the standing committee. If it did not possess the great advantages attributed to it, the sooner the public were disabused the better.

Mr. STANSBURY willingly accepted the offer of Mr. Chester; and after detailing several successful trials on an extensive scale,

The CHAIRMAN announced that the subject would be referred to the standing committee, who would be better able to judge of its merits.

## GEOLOGICAL SOCIETY.

NOVEMBER 16.—Prof. E. FORSTER (president), in the chair.

E. W. BINNEY, Esq., was elected a Fellow. The following communications were read:—

1. On the Superficial Deposits of the Isle of Wight; by J. TRIMMER, Esq.

The author observed that the boulder clay of the lower erratics is not found on the island, but that an abundance of flint gravel, probably of the age of the upper erratics of the Eastern Counties, occurs. With this gravel is often associated a loamy deposit termed by the author "warp-drift," which is of comparatively recent origin, and was not formed until after the denuded surface on which it rests had existed some time under sub-aerial conditions. Here and there it covers calcareous deposits of recent origin, containing land and freshwater shells of existing species. Mr. TRIMMER observed an occurrence of this marl, with shells and vegetable remains, at Tolland's Bay; and a similar deposit was noticed, some years since, by Mr. BOWERBANKS, as occurring below the sandstone and limestone to a great extent, the former known as the diamond sandstone, the latter characterised by fish remains of Jurassic age; but the relations of these rocks with the basalt are not evident. Lieut. SANKEY makes especial reference to the late researches of the Rev. MESSRS. HISLOP and HUNTER in the vicinity of Nagpoor, and concludes by detailing the observations made by himself and Dr. JERDON in the Kamptee, Oonarai, and Pacamurra districts (about lat. 22° 8' and long. 78° 46') on the several outcroppings of fossiliferous sandstone they met with. Most of the fossils are plants, Glossopteris, Phyllotheta, Vertebraria, &c., such as occur in the Burdwan coal of North-east India. The general aspect of this flora is somewhat Jurassic, and much resembling that of the Australian coalfields.

2. On the Geology of some parts of India; by Lieut. SANKEY, R.E., communicated by Prof. ANSTED, F.G.S.:—

In this paper the author gave a very general sketch of the distribution of different classes of rocks in Central and Southern India. The "red soil" and calcareous (Kankur) of the granite districts, the "black soil" of the basaltic districts, the "laterite" of the Konkan coast and other districts, called also locally "iron-clay" and "lithomarge," and, perhaps, the diamond breccia of Southern India, are superficial deposits. The age of the immense basalt or trap formation of Central India is unknown. At Nagpoor, Jubbulpoor, and in the Siebel Hills, it overlies and underlies a freshwater deposit. In the same district sandstone and limestone occur to a great extent, the former known as the diamond sandstone, the latter characterised by fish remains of Jurassic age; but the relations of these rocks with the basalt are not evident. Lieut. SANKEY makes especial reference to the late researches of the Rev. MESSRS. HISLOP and HUNTER in the vicinity of Nagpoor, and concludes by detailing the observations made by himself and Dr. JERDON in the Kamptee, Oonarai, and Pacamurra districts (about lat. 22° 8' and long. 78° 46') on the several outcroppings of fossiliferous sandstone they met with. Most of the fossils are plants, Glossopteris, Phyllotheta, Vertebraria, &c., such as occur in the Burdwan coal of North-east India. The general aspect of this flora is somewhat Jurassic, and much resembling that of the Australian coalfields.

GOLD ROCKS OF ENGLAND AND IRELAND.—At this period, when public

attention has been excited by the reports of the discovery of gold in our home mines, this work appears most opportunely. The author, Mr. JOHN CALVERT, is well known from his researches in Australia, he having traversed a great portion of that mighty continent. Although the working of gold to a profit in England may appear to be a chimerical idea, yet it has been seen, through the improved means of extracting, that profitable results can be obtained, and there is every probability that, if our mines are carefully developed, much auriferous ore, which has hitherto been neglected, will be found. Mr. CALVERT has carefully and elaborately collated all the facts with regard to the discovery of gold in England, as well as the various statutes affecting the extraction of that metal. In addition to this, an account is given of the gold fields of Scotland, Ireland, and Wales, detailing the numerous localities in which both native gold and its ores can be found. A retrospect is likewise given of the various other countries in the different hemispheres where it is met with, together with its geology. The present state of gold working in Great Britain is likewise ably treated. All those who are interested in gold mines, whether at home or abroad, would do well to peruse Mr. CALVERT'S work. The information there given is clear and lucid, and much that is probable, in works of this description appears to the general reader two technicalities which are avoided: even those not concerned in these adventures will find it an amusing and instructive book.

We learn from Chile, that an extension of the Copiapo Railroad was in process of construction,

## A 30-inch CYLINDER STEAM-ENGINE FOR SALE.

**NANSEGOLIAN MINE, CROWAN, CORNWALL.**—TO BE SOLD, BY PRIVATE CONTRACT, an excellent 30-inch cylinder STEAM-ENGINE, 9 ft. by 8 ft. stroke (manufactured within the last two years by Messrs. Sandys, Vivian, and Co., Hayle Copperhouses), with one boiler, about 9 tons, cistern, and all good work of engine-house and boiler-house, &c.

For a view of the same, apply to Capt. John Reynolds, Nansegolian Mine, Crowan; and for further particulars, and to treat for the same, application must be made to Capt. Nicholas Vivian, Camborne; or to Mr. Henry V. Newton, auctioneer and licensed emigration agent, Camborne.—Camborne, Cornwall, Oct. 20, 1853.

**STEWARTY OF KIRKCUDBRIGHT.**—TO BE LET, for such a period as may be agreed on, WOODHEAD LEAD MINES, in the parish of Carphain, Stewarty of Kirkcudbright, N.B. These mines have been worked by the proprietor since the year 1833, when the ore was first discovered near the surface, and they have yielded a considerable quantity of lead of the best quality. They are in complete working order, having every convenience for crushing, dressing, smelting, and refining, with suitable buildings and houses for the workmen.

A plan of the workings, and further information, may be obtained on application to Alexander Smith, W.S., Edinburgh; to Messrs. Carson Brothers, Liverpool; or to Mr. William Jones, Woodhead Lead Mines, Carphain, by Ayr, the latter of whom will show the mines, and furnish all necessary particulars.

**CUBERT UNITED MINING COMPANY.**—At an ADJOURNED GENERAL MEETING of the shareholders, held pursuant to notice from the secretary, at the offices of the Company, on Monday, November 14, 1853,

Mr. ROBERT BYRON in the chair.

The notice convening the meeting, and the minutes of the last general and special general meetings, were read and approved.

The financial statement (certified by D. Mocatta, Esq., auditor) having been read and explained, together with the reports of the committee and Capt. Samuel Richards, it was resolved unanimously:—

That the reports and statement of accounts now read be received, passed, and approved, and entered in the cost-book of the company.

That a call of 2s. 6d. per 9000 share be made, payable to the bankers of the Company, the London and County Bank, 21, Lombard-street, London, on or before Saturday, December 3, 1853.

Proposed by Mr. J. S. Tripp, and seconded by Mr. W. Reader:—

That the number of the committee of management be increased from three to five, whereupon the following amendment was proposed by Mr. James Ensor, and seconded by Mr. Henry Hoppe:—

That inasmuch as the resolution for an increase of the committee, proposed by Mr. J. S. Tripp, has been promoted by a speech involving a censure on the present committee, that the number be not increased.

The chairman then put the amendment, which was carried by a show of hands; and a scrutiny being demanded by Mr. J. S. Tripp, the following numbers appeared:

For the amendment..... 2109  
Against ditto..... 985

Majority in favour of amendment..... 1124

And resolved:—

That Messrs. Robert Byron, James Truscott, and James Ensor, be elected the committee of management until the next general meeting of shareholders.

A vote of thanks was passed to the chairman and acknowledged; a vote of thanks was also passed to the auditors, and acknowledged by Daniel Mocatta, Esq.

JAMES BARTLETT TRUSCOTT, Secretary.

Giles, 77, King William-street, London.

**TREVOSE MINE.**—At an ADJOURNED MEETING held this day, it was resolved:—

That a special meeting be called for Tuesday, the 29th November, at Two o'clock, to take into consideration the propriety of dissolving the company, and selling the lease and materials on the mine, and to determine the best mode of liquidating all claims thereon.—3, Church-court, Clement's-lane, City, Nov. 21, 1853.

**THE NEW DELABOLE SLATE QUARRY COMPANY.**

ST. TEATH, CORNWALL.

To be worked on the "COST-BOOK PRINCIPLE."

Capital £10,000, in shares of £1 each, to be paid for on delivery, without further calls.

No Deed of Settlement to be signed.

DIRECTORS.

Capt. M. J. CURRIE, R.N., Vernon-terrace, Brighton.—CHAIRMAN.  
W. BROWNE, Esq., 4, Pancras-lane; and Rochester-terrace, Camden-road.

CHARLES BURLS, Esq., Horsell, Surrey.

THOMAS CLARKE, Esq., Bodmin, Cornwall.

FRANCIS FORD, Esq., 9, Lawrence Pountney-hill; and 9, Milner-street, Milner-square, Islington.

J. B. GLENN, Esq., Arundel-square, Islington.

J. N. GORDON, Esq., F.R.S., S.A., The Priory, Islington.

J. N. HELLING, Esq., Streatham, Surrey.

J. MARTYN, Esq., Helland, St. Teath, Cornwall.

Major MAYNE, Marlborough-terrace, Kensington.

BANKERS.—Messrs. Williams, Deacon, and Co., London; Messrs. Robins, Foster, and Co., Camelford, Cornwall.

SECRETARY AND PURSER.—J. N. GORDON, Esq., F.R.S., S.A.

COMMERCIAL MANAGER.—F. FORD, Esq.

CONSULTING ENGINEER.—William Simpson, Esq., Belgrave Works, Pimlico.

SOLICITORS.—Messrs. Gurney and Lethbridge, Coward, Launceston; Preston Wallis, Esq., Bodmin.

BROKERS.—Messrs. R. W. Moore and Carr, 61, Threadneedle-street, London.

OFFICES.—No. 9, LAWRENCE POUNTNEY HILL, CANNON STREET.

The great and increasing demand for roofing slate, especially for the quality raised at the Delabole Quarry, which, according to the statement of Sir Henry de la Beche, is the best description yet discovered, and the inadequacy of the present operations to supply such demand, render it absolutely necessary to open larger quarries, and to work them on a more extended scale.

The New Delabole Slate Quarry Company have had the good fortune to secure, on most favourable terms, as stated below, a 60 years' lease of the Helland Estate, consisting of 40 acres of land, immediately adjoining the famous Old Delabole. The latter quarry has been wrought for upwards of 500 years; and there are instances of this slate having been in use for nearly 300 years, and then again employed in covering buildings.

The Delabole slate, being of a bluish-grey colour, is now generally preferred by architects, for roofing purposes, to the darker shades, which, by attracting heat, warp and decompose the timber. It is a very clean, well laminated stone, in cleavage and tenacity exceeded by none yet known; it polishes well, and is, therefore, extensively used for billiard tables, mantel-pieces, cisterns, paving, and slab-work in general.

The New Delabole lies on the south of, and closely adjoins the old quarry, as may be seen on reference to the plan; but, while in the old workings the good bed of slate is at a depth of 75 ft., and, consequently, the over-loading is removed at a very considerable outlay, in the New Delabole a precisely similar bed of slate is found within a few feet of, and crops out at, the surface. Besides this advantage, there is a powerful stream of water running down the east side of Lot No. 5, sufficient for driving the required machinery, and affording drainage for the quarry. There is also ample space for disposing of the waste, at a level below that of the proposed actual workings. These very great natural advantages will enable the company to work the New Delabole at a considerably less outlay in procuring the same quantity of slate than must be incurred in the Old Delabole.

Having, by several openings, demonstrated that the New Delabole contains precisely the same quality of slate as the Old, the superior advantages possessed by the former may be enumerated as follows:—

1. The New Delabole is nearer the port of shipment, with which it is connected by excellent roads.

2. It possesses an abundant supply of water to drive the necessary machinery.

3. The required surface clearing is not one-third of what is needed in the old quarry.

4. There is convenient and extensive space for deposit of the waste material at lower elevation than the top of the proposed workings.

5. The property is free of rental, and not subject to dues, until after sales are effected.

The Old Delabole Quarry was sold by T. Avery, Esq., to the present holders for £21,000. A further outlay has since been made, for the purchase of adjoining ground, machinery, &c., of at least £40,000. In addition to this the quarry is subject to a rental of £300 per annum. Notwithstanding such large expenditure, and the great cost of removing the overloading, a very remunerative rate of profit is realised by the shareholders.

A serious obstacle in the way of fully developing the Delabole district has hitherto been the want of a good and, at all times, available shipping place. This deficiency it is proposed to obviate by constructing a railway from the New Delabole Quarries to the railway at Wadebridge, and thus securing a cheap, easy, and certain transit of the slate to Wadebridge, whence they can be shipped at all seasons, and where there is no difficulty in procuring vessels, on return freight, whenever required. The contemplated arrangements will open up a large district of country; and it is confidently believed that the conveyance of coal, granite, manure, and sand, which is very much used as such by the agriculturalists here, will realise a revenue which would go far toward yielding a return for the capital invested.

The length of the required railway is six miles, and the estimated cost £12,000, responsible contractors having proposed to execute the same for that amount. Assuming that 20,000 tons only of slate were sent off annually, the carriage to Port Gavern would be:—

If by present mode, say, 20,000 tons, at 2s. 6d. per ton..... £2500

Freight from Port Gavern above that payable at Wadebridge + Padstow, at 1s..... 1600—£3500

If conveyed by railway to Wadebridge, at 2s..... 2000

Amount saved per annum on transit..... £1500

Apart from all other sources of revenue, such a result would fully justify the construction of a railway. Beside, the avoiding of breakage in the transit of slate by rail, compared with the common road, would be very considerable.

The proposed capital will be appropriated as follows:—

Purchase of lease.....	£20,000
Constructing railway.....	12,000
Plant, machinery, &c. ....	6,000
Working capital .....	14,000

Total capital..... £50,000

and taking the annual rate of slate, as above, at 20,000 tons, with an average profit of £1 per ton, there would be a return of 50 per cent. on the capital employed.

TERMS.—The lessees have agreed to assign their entire interest in the property to the proposed company for £3000—viz., £1500 in cash, and £2500 in shares. The estate is free of rent: the royalty is fixed at the moderate sum of 1-17th at the shipping place; and the compensation for land destroyed at £100 per acre, such compensation being only payable as each half-acre is quarried. The company have secured the lease entire control over the property as to operations and plans of working.

Attention is particularly requested to the reports respecting the resources and prospects of this undertaking; and the directors hold themselves responsible for the accuracy of the statements contained therein, two of their body having visited and carefully inspected the property. The directors have no hesitation in recommending this quarry as a bona fide investment.

Shares will be issued in any numbers not less than five at the company's offices, and by the following parties, for cash payment of par, until further notice:—Messrs. M. Long and Carr, 61, Threadneedle-street, London; Messrs. Gurney and Lethbridge and Co, and John T. Pearce, Esq., Launceston; Preston Wallis, Esq.; and Thomas Clarke, Esq., Bodmin; and John Martyn, Esq., Helland, St. Teath, Cornwall, of whom also detailed prospectuses, with reports, can be obtained.

## RAILWAY WAGONS.—WM. A. ADAMS MIDLAND WORKS, BIRMINGHAM. BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS, IN STOCK—FOR SALE OR HIRE.

**THOMPSON AND CO.** (Established 1796), CONSULS FOR VARIOUS COUNTRIES; AGENTS FOR THE FRENCH AND HAMBURG UNDERWRITERS AND AUSTRIAN LLOYD'S; NORTH SHIELDS, NEWCASTLE-ON-TYNE, and HARTLEPOOL.—SHIPPERS OF COAL, COKE, IRON, &c.

**WANTED.**—A HIGH-PRESSURE BOILER, plain, with hemispherical ends, about 3 ft. 6 in. diameter, and 38 ft. long, plates  $\frac{1}{2}$  in., and well equal to a pressure of 60 lbs.—Apply to "A. Y. Z." Mining Journal office, 26, Fleet-street, London.

**WANTED TO PURCHASE, FIVE SHARES** in the MIDLAND MINING SHARE COMPANY, DERBYSHIRE.—Address, "R. H. Box 124," Post-office, Sheffield.

**FOR SALE.**—A SECOND-HAND SIX-WHEELED LOCOMOTIVE ENGINE and TENDER, in good order; will be sold a bargain.—Apply to George Worrell and Co., railway wheel and axle manufacturers, Warrington.

**STEAM-ENGINE.**—FOR SALE, a 60-inch cylinder STEAM-ENGINE, nearly new, and of the best construction, with or without boilers.—Apply to Mr. Josiah Phillips, engineer, Marazion, Cornwall.

**MINERAL PROPERTY TO BE LEASED.**—The PROPRIETOR of an extensive and highly MINERALISED ESTATE in CORNWALL is prepared to GRANT MINING SETTS, for terms of 21 years, to bona fide companies on liberal terms.—Apply by letter, pre-paid, "W.," Mining Journal office, 26, Fleet-street, London.

**TO BE LET FOR A TERM OF YEARS, OR SOLD,** a valuable TRACT, containing all the well-known VEINS of ANTHRACITE COAL and IRON MINE of the county of GLAMORGAN.—For further particulars, apply to "D. E. F." Post-office, Neath.

**CAPT. THOMAS DUNN,** of TAVISTOCK, undertakes to INSPECT, REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND, IRELAND, SCOTLAND, or WALES. No objection to take the management of any mine or mines in the neighbourhood of Tavistock.

**WHEAL AUGUSTA, ST. JUST.**—The BUSINESS of this MINE will in future be CONDUCTED in the offices at 3, OLD BROAD STREET.

**NOTICE.—TREBURGET CONSOLS MINING COMPANY.**—The public are hereby CAUTIONED against PURCHASING any of the SHARES in this company numbered from 501 to 982, and from 1001 to 1518, inclusive; the same having been FRAUDULENTLY OBTAINED, consequently will not be recognised by the company.

J. HUNTER, Sec.

**A RUNDELL UNITED COPPER MINE.**—SHARES in this MINE BOUGHT or SOLD by THOMAS BROOKE WAVELL, 3, Adam's-court, Old Broad-street: who can also DEAL in TASSAN LEAD SHARES.

**QUINTRELL DOWNS COPPER MINE.**—Any person wishing to dispose of SHARES in QUINTRELL DOWNS may hear of a BUYER by addressing a line, with lowest price, to M. BARTON, Esq., Post-office, Bristol.

**WEST CARADON MINE.**—WANTED, THREE SHARES in the above MINE, for which IMMEDIATE CASH will be paid.—Apply to BARTON BROTHERS, metal brokers, 73, Old Broad-street.

**MINING.**—FOR SALE, NINETY SHARES in BOSORN MINE, price 35s. per share; and FORTY-EIGHT SHARES in PENZANCE CONSOLS, price 12s. 6d. per share.—For further particulars, apply to Mr. T. CARTHEW, mining offices, St. Just, near Penzance.

**GREAT POLGOOTH MINE.**—FIRST INSTALMENT OF TEN SHILLINGS OF CALL OF FIFTEEN SHILLINGS PER SHARE.—The committee appointed by the adventurers in the above mine at a general meeting, held 6th September last, now EARNESTLY CALL upon those adventurers who have not yet paid the above instalment, to FORWARD the same forthwith to the London and County Bank, 21, Lombard-street. It can scarcely be expected that gentlemen will undertake the management of so extensive and important a property, however great the results are likely to prove hereafter, if they are not furnished with the means to carry out the system agreed to by the adventurers themselves, and for which they voted the necessary funds. Every information respecting the above mine, and access to all books and papers connected therewith, may be had by any adventurer at the office of the secretary, 53, Old Broad-street.

Dated Nov. 19, 1853. By order of the Committee, WM. C. FOULKES.

**BRITANNIA GOLD AND COPPER MINING COMPANY.**—Notice is hereby given, that the next QUARTERLY GENERAL MEETING of the shareholders will be HELD at the offices of the company, No. 5, Barge-yard Chambers, on Wednesday, the 7th of December next, at One o'clock precisely, to receive a Report from the Committee of Management, and for general business.

By order, ROBT. J. BISDEE, Sec. and Purser.

5, Barge-yard Chambers, Bucklersbury, London, Nov. 18, 1853.

**TREWEATHA MINE.**—Notice is hereby given, that a GENERAL MEETING of the adventurers will be HELD at the Account-house of the Mine, on Tuesday, the 6th December, at Twelve o'clock precisely.

The Transfer-books of the company will be closed from the 3d to the 7th December, both inclusive.

J. A. JOSEPH, Sec.

**THE PIEMONTAISE.**—THE ROYAL ANGLO-SARDINIAN COMPANY, established at Turin for the purpose of WORKING the MINES in ITALY, has COMPLETED its ARRANGEMENTS, by organising committees in London and Paris.—Apply to Paris to the Comptoir General des Mines, No. 44, Rue Notre Dame des Victoires.

**ST. JOHN DEL REY MINING COMPANY.**—Notice is hereby given, that the TWENTY-THIRD HALF-YEARLY DIVIDEND, being TWO POUNDS per share, free of income-tax, on the shares of this company, will be PAYABLE at this office on Saturday, the 10th day of December, and every succeeding day, between the hours of Ten and Four.

Forms for claiming the dividend may be obtained at the company's office, and must be left three clear days for examination previous to payment.

8, Tokenhouse-yard, London, Nov. 21. Signed, JOHN HOCKIN, Sec.

By order of the Directors, JOHN ANDERSON, Sec.

31, Lime-street, London, Oct. 25, 1853.

**MINING SHARES.**—Mr. CARTHEW, not being a dealer in mining shares, TRANSACTS BUSINESS ONLY for PRINCIPALS on COMMISSION; therefore has SHARES FOR SALE in the following MINES:—

Alfred Consols East Wh. Margaret Penzance Consols West Wh. Darlington

Ashteadwiden Great Wh. Alfred Treloar Wh. Wheal Lilly

## VALUABLE COAL AND MINERAL FIELD.

Adjoining GLASGOW, in the centre of its manufactures and public works, within a quarter of a mile of the River Clyde, at Rutherglen Bridge, and a mile and a half from the Broomielaw, or Harbour of Glasgow.

**TO BE SOLD**, by PUBLIC ROUP, within the Royal Exchange Sale Room, Queen-street, Glasgow, upon Wednesday, the 14th day of December next, at Two o'clock, unless previously disposed of by private bargain, the RESERVED COAL and MINERALS in from 35 to 40 imperial acres of the LANDS of BRIDGETON, bounded on the north and north-east by the turnpike road from Glasgow to Dumfries Bridge; on the east by the property of the Glasgow and Suburban Gas Company, and the lands belonging to Messrs. Henry Monteith and Co.; on the south by the said lands belonging to Messrs. Henry Monteith and Co., so far as the coal and minerals in the same are not reserved; and on the west by the turnpike road leading from Glasgow to Rutherglen, including a portion of ground adjoining the field above described, and lying on the west side of said road leading from Glasgow to Rutherglen. Along with the coal and minerals, there will be sold about two acres of ground, in the centre of the coal-field, and affording ample space for sinking pits and bingings, and with access to markets on all sides.

The coal in the above lands, and known and worked in the lands to the east, south, and north of the same, consists of the Upper, Ell, Main, Humble, and Splint seams, averaging about 18 feet thickness in all.

The existence of valuable seams of coal has been proved, by boring in the Green, or Public Park of Glasgow, immediately to the west of Bridgeton Coal-field, as appears from reports submitted to the Corporation from time to time, and printed for circulation among the Members of Council. Various other seams of coal exist below those above given, and ironstone, including the blackband, has been worked in the adjacent coal-fields.

The coal in question can be sent to every part of Glasgow and its manufactures, and has access to its harbour and river, free of all tolls, the distances of transport varying from a few hundred yards to a couple of miles; and there is a ready market for the ironstone.

Difficulties, consequent on the nature of the stratum above the Bridgeton coal, hitherto prevented attempts to work the same. By modern improvements in mining, these difficulties are now entirely overcome; and a great number of coal-fields, both in England and Scotland, in which these obstacles existed to a much greater extent than at Bridgeton, are now in extensive and profitable operation.

A great portion of the land in which the coal and minerals above described are situated, is either unbuilt upon or occupied by streets or buildings of little value. From the nature of the stratum, there is little or no danger of surface damage in working the coal now advertised. The amount of the risk may be estimated from the fact that the coal in land, bounding that now advertised, and on which erections of great value were placed, was lately sold (the price being fixed by arbitration) to the proprietors of the soil for £500 per acre. The coal so sold was situated, as regards markets, in a situation much inferior to that now offered for sale, and was subjected to turnpike tolls on its way to market.

The proprietors of the coal and minerals above described, though preferring a sale, do not object to let the same to a modest and enterprising tenant, on conditions which will be stated to applicants for lease.

Lithographed plans of the coal-field and lands, showing their situation as regards Glasgow, its manufactures, harbour, &c., &c., may be had, together with all necessary information, by application to Messrs. C. D. Donald and Sons, writers, Glasgow, whose hands are the title deeds; Messrs. Grahame, Weems, and Grahame, parliamentary solicitors, Great George-street, Westminster; or to Thomas Grahame, Esq., Hatton Hall, Wellington, Northamptonshire.—Glasgow, October, 1853.

**O**EE CRUSHING.—CAUTION.—I hereby CAUTION all persons MANUFACTURING, USING, and SENDING, without special license from me, MACHINES for the purpose of CRUSHING, PULVERIZING, and AMALGAMATING mineral and other substances, in which BALLS or SPHERES ARE USED IN CONNECTION WITH, OR MOVED BY, A REVOLVING PLATE OR PLATES, the same having been secured to me through, and in the name of, my agent, C. J. Wallis, under various modifications, by Her Majesty's Letters Patent for England and the Colonies, dated June and December, 1852. Signed, J. W. COCHRAN.

N.B. Licenses will be granted, and machines supplied, on application to Mr. J. W. Valentine, 38, Cannon-street, City, agent for the above.

**P**ERKES'S PATENTED MACHINERY FOR THE REDUCTION OF ORES, &c.—GOLD QUARTZ COMPANIES, MINING COMPANIES, and OTHERS, REQUIRING MACHINERY FOR WORKING AURIFEROUS AND OTHER ORES, are respectfully informed that the PATENTED MACHINERY, invented by the undersigned, will operate upon more quartz per day, and at a less cost of power, than any other machine hitherto made, and which he guarantees will by far supersede every description of revolving or stationary pans with one or more bars working within them, but which are also included in his patent; and that no one else has, or can have, a valid patent for such apparatus in this country; and NOTICE IS HEREBY GIVEN, that PROCEEDINGS WILL BE ADOPTED FORTHWITH AGAINST ANY PARTY USING, OR PURCHASING, SUCH MACHINES WITHOUT HIS LICENSE AND AUTHORITY; but if any party chooses to adopt such revolving pans with bars for their operations, he will be happy to supply them at a cost of not exceeding £150 each.

SAMUEL PERKES, Engineer and Patentee, 1, Walbrook, City, Nov. 5, 1853.

**T**HE CHEAPEST AND MOST POWERFUL QUARTZ CRUSHER yet invented is BAGGS'S STEAM STAMP, protected by a double patent. A small 4-horse engine will crush 30 tons of quartz or iron in 12 hours. The engine is complete in itself, and needs no separate steam-engine, or other motive power, to keep it in action.—To be seen every day at 33, Borough-road.

These stamping-engines are capable of CRUSHING BLOCKS A FOOT SQUARE.

**E**XTRACTION OF GOLD AND SILVER FROM THEIR ORES.—The NEW RAPID AMALGAMATOR (BAGGS'S PATENT) requires ONLY HALF the usual amount of MERCURY, and effects an enormous SAVING OF TIME in the process of AMALGAMATION. The NEW MERCURIAL SEPARATOR, secured under this same patent, effects a complete separation of the mercury from the refuse quartz, after the process of amalgamation is complete, in the space of A FEW SECONDS, instead of requiring, as at present, a tedious operation of some two hours.

In these machines, improved mechanical arrangements are aided by the most powerful chemical affinity, and from the principles introduced, it is next to impossible for a particle of gold to escape. The three following companies have already adopted these important improvements:—The Anglo-Californian Gold Mining, the Alliance California Gold Mining, and the Anglo-Australian Gold Mining Company.

For terms of license, and other particulars, apply to Mr. Isham Baggs, Mining Journal office, 26, Fleet-street.

**T**HE NEW STEAM STAMPS, FOR CRUSHING GOLD QUARTZ AND METALLIC ORES.—(BAGGS'S PATENT).

These powerful MACHINES are now TO BE HAD at a SHORT NOTICE, and of any number of horse-power, from four to twenty.—All communications to be addressed to Mr. ISHAM BAGGS, at the office of the Mining Journal, 26, Fleet-street.

A 4-horse Steam Stamp, complete, £160, royalty included, for cash, and other sizes at proportionate rates.

The following Testimonial of the power and efficacy of these engines is from the manager of one of the smelting establishments in South Wales, where steam stamps, of moderate power, under this patent, have been for some time in operation:

TO ISHAM BAGGS, Esq., LONDON.

DEAR SIR,—In reply to your letter of inquiry about the action of your Patent Stamping Machine, I beg to say, that I have now had it fully at work for two months; the quantity of coarse metal it will crush with ease is about 20 tons in 10 hours—about two-thirds is crushed fine, the remainder would require to be stamped a second time, to reduce it to the same fineness. The steam used is very little, and the crushing force very great; large lumps of the metal (which is very hard) are immediately broken down—when I say large, I mean lumps as big as ordinary paving stones. I am now putting up the second machine which you sent me, and have no doubt it will give (as the first has already done) entire satisfaction. I am quite convinced that the principle is excellent, and far superior to any other mode of crushing.

Spitzy Copper Works, Llanelli. I am, yours, &c., ALFRED TRUEMAN.

The patent stamps may be used with atmospheric pressure, through the medium of a water-wheel or other prime mover. The application is extremely simple, very powerful, and where a motive-force is ready at hand, the machines cost less than when steam is employed.

**N**OTICE.—TO GOLD COMPANIES, AND THE NEW STEAM STAMPS.—One of these powerful ENGINES HAS JUST BEEN ERECTED, and is NOW SET TO WORK, at Messrs. BURLEY and BUNN'S, Engineers, No. 53, BOROUGH ROAD, where it may be seen in operation daily, and its powers subjected to any required test. These stamps, after the most careful inspection, have already been adopted by the following companies:—

THE ENGLISH AND AUSTRALIAN COPPER COMPANY.

THE ANGLO-CALIFORNIA GOLD MINING COMPANY.

THE ALLIANCE GOLD MINING COMPANY.

THE MEXICO AND SOUTH-AMERICAN MINING COMPANY.

THE ST. JOHN DEL RAY (Gold, Brazil).

THE LINARES LEAD MINING ASSOCIATION (Spain).

THE LONDON AND CALIFORNIA GOLD QUARTZ CRUSHING COMPANY.

THE ALMADEN MINING AND SMELTING COMPANY (Spain).

THE SAN FERNANDO LEAD MINING COMPANY (Carolina, Spain).

THE N.W. LINARES LEAD MINING ASSOCIATION (Spain).

And they are about to be adopted by several other companies and private individuals, who have earlily timed the results of their crushing powers, and submitted their capabilities to the most severe tests. In proof of the utility of these engines, it may be observed, that the saving in manual labour which they will effect to one company alone (the St. John del Ray) will amount to many thousand pounds sterling per annum.—For cards to view the engine at Messrs. Burley and Bunn's, apply, by letter, to Mr. Isham Baggs, Mining Journal office, 26, Fleet-street, London, where any further particulars may be obtained on application.

**I**MPROVED STEAM HAMMERS.—Mr. ISHAM BAGGS is now prepared to SUPPLY ironmasons, engineers, manufacturers, and miners, with STEAM HAMMERS and STAMPS of the MOST IMPROVED CONSTRUCTION, for forging and hammering iron and other metals, driving piles, and stamping and crushing gold quartz, metallic ores, and minerals of every description. By the introduction of a principle recently patented by himself, in conjunction with Mr. W. Black Braundell, C.E., no less than FIFTY PER CENT. of STEAM now used is SAVED, while the blow struck is very much harder than in the engines now in use.

The NEW STEAM-STAMPS, for crushing ores, have been adopted by many of the leading companies, and they are now at work in various parts of North and South America, Australia, and England. They are eminently adapted for spalling, as well as crushing to fine powder, and they effect an enormous saving in superseding manual labour. A four-horse steam-stamp complete, with all the latest improvements, £160 (royalty included), for cash; a twenty-horse engine ditto, £550, and other sizes at proportionate rates. Contracts to any extent undertaken.

For further particulars, apply to Mr. Isham Baggs, Mining Journal office, No. 26, Fleet-street, London.

**S**EVERAL OF BAGGS'S PATENT STEAM STAMPS (at prices varying from £50 to £160) are NOW ON SALE, and READY FOR DELIVERY AT A DAY'S NOTICE. They effect an enormous saving of time and labour in spalling, cobbing, and crushing ores.—All communications to be addressed, Mr. Isham Baggs, Mining Journal office, 26, Fleet-street, London.

## THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.

DEPARTURES OUTWARDS.

INDIA and CHINA, via EGYPT.—For Aden, Ceylon, Madras, Calcutta, Penang, Singapore, and Hong Kong, on the 4th and 20th of every month from Southampton; and on the 10th and 26th from Marseilles.

AUSTRALIA via SINGAPORE.—For Adelaide, Port Phillip, and Sydney (touching at Batavia), on the 4th January, and 4th of every alternate month thereafter from Southampton; and on the 10th January, and 10th of every alternate month thereafter from Marseilles.

MALTA and EGYPT.—On the 4th and 20th of every month from Southampton; and the 10th and 26th from Marseilles.

MALTA and CONSTANTINOPEL.—On the 27th of every month from Southampton.

MARSEILLES and THE COAST OF ITALY.—From Marseilles to Genoa, Leghorn, Civita Vecchia, and Naples, on the 15th and 30th of every month; and from Naples to Civita Vecchia, Leghorn, Genoa, and Marseilles, departing from Naples on the 19th and 4th of the month.

SPAIN and PORTUGAL.—For Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, from Southampton, on the 7th, 17th, and 27th of every month.

CALCUTTA and CHINA.—Vessels of the Company ply occasionally (generally once a month) between Calcutta, Penang, Singapore, Hong Kong, and Shanghai.

For further information, and tariffs of the Company's rates of passage-money and freight, for plans of the vessels, and to secure passages, &c., apply, at the Company's offices, 122, Leadenhall-street, London; and Oriental-place, Southampton.

**PATENT IMPROVED WIRE ROPE WORKS, MILLWALL, POPLAR.**—A. J. HUTCHINGS and CO., Sole Makers to the Lords of the Admiralty.—FLAT ROUND and FLAT ROPES, of every description, suitable for mining operations or other purposes, GALVANIZED or UNGALVANIZED, MANUFACTURED upon an IMPROVED PRINCIPLE, ensuring great pliability and durability. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.

GUIDE ROPES, SIGNAL CORD, LIGHTNING CONDUCTORS, &c. OFFICES, 117, Fenchurch-street, London.

**M**R. G. F. MUNTZ'S (JUN.) PATENT SOLID BRASS TUBES, 12d. per lb., delivered in any part of the United Kingdom.—In introducing these tubes to the notice of engineers and the public, the patentee respectfully directs attention to some of the advantages they possess over those previously in use:—

1st. Economy in the first cost.—2d. Greater durability, being made of a mixture of metal hard in its own nature, and not mechanically hardened, as ordinary brass tubes are, which renders them liable to split or burst when subjected to the expansion and contraction caused by the heating and cooling of the boiler.—3d. Equality of hardness throughout, the metal being sufficiently tough, to bear expanding, when fixing in the boilers, without softening the ends, which is necessary in brass tubes previously in use, and which causes the softened parts to wear more.—4th. They are less liable to corrode than any mixture of brass which can be manufactured into tubes by the process previously employed.

G. F. Muntz's Patent Metal Company, French Walls, Birmingham, sole manufacturers.—Agents for London: Charles Moss and Co., 23, Fenchurch-street; Young, Dawson, and Co., Linchouse.—Bristol: E. Drew, Clifton Park.—Liverpool: C. Moss and Co., Redcross-street.

**S**AMUEL ELLIS AND CO., MILLWRIGHTS, ENGINEERS, AND IRONFOUNDERS, IRWELL WORKS, SALFORD, MANCHESTER, Manufacturers of Steam-engines, Boilers, Mill-gearing, Water-wheels, Tanks, Pumps, &c.; Railway Plant on the most approved principles, Turn-tables, Stationary and Travelling Cranes, Switches, Crossings, Water-crane, Crabs, Hoists, &c.; Bridges, Girders, Columns and Machinery Castings. Licensed to Manufacture various Patent Articles. Estimates and Plans prepared for any Engineering Work.

**T**O IRONMASTERS.—JEREMIAH BROWN AND CO. ARE NOW PREPARED TO ENTER into ARRANGEMENTS to ERECT their PATENT MACHINE for COMPRESSING PUDDLED BALLS, and DOUBLING the same in the ROLLS.—By adopting this machine, bars may be produced to 6, 7, 8, or 9 inches wide, or wider if required, direct from the puddled ball. In Yorkshire and Staffordshire, where these machines are adopted, long bars are rolled suitable for piles, for large rails, boiler-plates, &c. Iron from the Dowlais ironworks, and other extensive works in Wales, has been sent to Staffordshire to test the machine, and it proves to be the best modern invention ever used, requiring no unusual labour, and the most tender iron is made into the broadest of bars. The operation of the machine greatly improves the quality of the iron. It is now working for thirty furnaces, and is capable of working for as many more.—Application to be made to Jeremiah Brown and Co., Kingswinford, near Dudley, Staffordshire.—Oct. 31.

**I**MPORTANT TO IRONMASTERS.—JEREMIAH BROWN AND CO. ARE NOW PREPARED TO ENTER into ARRANGEMENTS to ERECT their PATENT MACHINE for COMPRESSING PUDDLED BALLS, and DOUBLING the same in the ROLLS.—By adopting this machine, bars may be produced to 6, 7, 8, or 9 inches wide, or wider if required, direct from the puddled ball. In Yorkshire and Staffordshire, where these machines are adopted, long bars are rolled suitable for piles, for large rails, boiler-plates, &c. Iron from the Dowlais ironworks, and other extensive works in Wales, has been sent to Staffordshire to test the machine, and it proves to be the best modern invention ever used, requiring no unusual labour, and the most tender iron is made into the broadest of bars. The operation of the machine greatly improves the quality of the iron. It is now working for thirty furnaces, and is capable of working for as many more.—Application to be made to Jeremiah Brown and Co., Kingswinford, near Dudley, Staffordshire.—Oct. 31.

**M**ANUFACTURERS.—JEREMIAH BROWN AND CO. ARE NOW PREPARED TO ENTER into ARRANGEMENTS to ERECT their PATENT MACHINE for COMPRESSING PUDDLED BALLS, and DOUBLING the same in the ROLLS.—By adopting this machine, bars may be produced to 6, 7, 8, or 9 inches wide, or wider if required, direct from the puddled ball. In Yorkshire and Staffordshire, where these machines are adopted, long bars are rolled suitable for piles, for large rails, boiler-plates, &c. Iron from the Dowlais ironworks, and other extensive works in Wales, has been sent to Staffordshire to test the machine, and it proves to be the best modern invention ever used, requiring no unusual labour, and the most tender iron is made into the broadest of bars. The operation of the machine greatly improves the quality of the iron. It is now working for thirty furnaces, and is capable of working for as many more.—Application to be made to Jeremiah Brown and Co., Kingswinford, near Dudley, Staffordshire.—Oct. 31.

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**T**HIS is the first time that any machine has been invented for the purpose of compressing puddled balls, and doubling them, which has been so successful, and which has been adopted by so many ironworks in the country.

**S**AMUEL ELLIS AND CO., MILLWRIGHTS, ENGINEERS, AND IRONFOUNDERS, IRWELL WORKS, SALFORD, MANCHESTER, Manufacturers of Steam-engines, Boilers, Mill-gearing, Water-wheels, Tanks, Pumps, &c.; Railway Plant on the most approved principles, Turn-tables, Stationary and Travelling Cranes, Switches, Crossings, Water-crane, Crabs, Hoists, &c.; Bridges, Girders, Columns and Machinery Castings. Licensed to Manufacture various Patent Articles. Estimates and Plans prepared for any Engineering Work.

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## THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5120 Alfred Consols (copper), Phillock	£2 16s	£36	25½ 26½	29 9 0	£0 18 0	Nov., 1853.
2000 Anglesea Coal Company	4	4	4	0 2 0	0 2 0	Nov., 1852.
624 Balaeswidden (tin), St. Just	11½	10½	12 0 0	0 5 0	0 5 0	Aug., 1853.
5000 Bar Holles, Worthen, Salop.	13s. 6d.	12	10 0 0	0 10 0	0 10 0	April, 1853.
4000 Bedford United (copper), Tavistock	2½	7½	7½ 8	5 5 0	0 4 0	Nov., 1853.
5000 Black Craig (lead), Kirkcudbrightshire	5	4	7½	5 0 0	0 2 6	July, 1853.
124 Boweswidden and Wheal Castle	—	20	—	5 0 0	0 5 0	May, 1853.
2500 Bottsbeck (tin, copper), St. Just	91½	390	262 15 0	5 0 0	0 5 0	Oct., 1853.
1000 Bryntail, Llanilloes, Montgomeryshire	7	4½	3½ 4	1 8 0	0 4 0	Sept., 1847.
2500 Callington (lead, copper), Callington	7½ 17½	2	—	223 10 0	2 0 0	Sept., 1853.
1000 Carn Brea (copper, tin), Illogan	15	8½	—	—	—	—
125 Comford (copper), Gwennap, Cornwall	7½	30	32	40 0 0	3 0 0	Oct., 1853.
2500 Condurrow (copper, tin), Camborne	20	130	130	—	—	—
2510 Cook's Kitchen (copper, tin), Illogan	15. 18s. 9d.	2½	3	25 0 0	5 0 0	Sept., 1853.
125 Cwmyntif (lead), Cardiganshire	60	150	350	358 0 0	9 0 0	Nov., 1853.
1024 Devon Great Consols (copper), Tavistock	1	200	390	0 3 0	0 1 8	Nov., 1853.
20000 Dhuoro (copper), Ireland	1	1	1 ½	55 0 0	—	1850.
672 Ding-Dong (tin), Galway	5	6	—	—	—	—
179 Dolsoath (copper, tin), Camborne	257½	100	95 97½	67 4 0	4 0 0	Oct., 1853.
2500 Drake Walls (tin, copper), Calstock	17. 9s.	2	—	0 6 6	0 1 6	April, 1853.
300 East Darren (lead), Cardiganshire	23	105	233 0 0	2 0 0	Jan., 1853.	—
125 East Pool (tin, copper), Pool, Illogan	24½	160	180 170	840 0 0	—	—
94 East Wheal Croft (copper), Illogan	125	67½	2245 0 0	10 0 0	March, 1852.	—
125 East Wheal Rose (silver-lead), Newlyn	50	100	—	1 3 4	0 10 0	Aug., 1853.
1200 Elyan Mining Company, Derbyshire	3½	15	399 13 0	1 10 0	Aug., 1850.	—
494 Fowey Consols (copper), Tywardreath	40	50	—	1 0 8	0 3 3	June, 1853.
515 General Mining Co. for Ireland (cop., lead)	1½	2½	23 0 0	5 0 0	Sept., 1850.	—
2500 Goginan (lead), Cardiganshire, Wales	4½	18	—	0 7 6	0 7 6	Dec., 1852.
1024 Gonamens (copper), St. Cleer	12½	10½	12	353 6 8	—	Jan., 1851.
2000 Great Onslow Consols, Camelot	1½	—	—	0 2 0	0 2 0	June, 1852.
13750 Great Polgoon (tin), St. Austell	3½	1	—	0 10 0	0 4 0	Oct., 1852.
119 Great Work (tin), Germoe	100	155	165 17 6	5 0 0	0 9 0	Nov., 1853.
1024 Herodsfoot (lead), near Liskeard	8½	10	9½ 10	25 0 0	—	Feb., 1844.
1600 Holmbois (lead, copper), Callington	25	14	—	3 5 0	0 5 0	March, 1851.
2500 Holyford (copper, near Tipperary)	11	7	380 0 0	0 1 6	0 1 6	Sept., 1853.
76 Jamaica (lead), Mold, Flintshire	31. 13s. 6d.	20	—	0 1 0	0 5 0	Sept., 1853.
20000 Kennmare and West of Ireland	1	1½	—	1 10 0	0 1 0	July, 1853.
786 Kirkcudbrightshire (lead), Kirkcudbright	9½	4	3½ 4	—	—	—
20000 Lackmann (copper)	1	¾	¾ ¾	—	—	—
20 Laxey Mining Company, Isle of Man	100	1300	—	0 2 0	0 2 0	Aug., 1851.
5000 Lewis (tin, copper), St. Erth	3½. 8s.	2½	2½ 3	0 2 0	0 2 0	April, 1853.
160 Levant (copper, tin), St. Just	2½	100	1088 0 0	2 0 0	2 0 0	—
4100 Lisbreen (lead), Cardiganshire, Wales	18½	225	191 5 0	5 0 0	0 10 0	Oct., 1853.
6000 Marke Valley (copper), Caradon	41. 10s. 6d.	3½	0 2 6	2 0 0	May, 1853.	—
5000 Mendip Hills (tin), Somerset	3½	3½	0 10 0	0 10 0	0 10 0	Oct., 1851.
5000 Merlin (lead), Flint	2½	1½	1 11 0	0 2 0	0 2 0	June, 1853.
5000 Milwr (lead), Flintshire	3	3½	0 4 0	0 10 0	0 10 0	July, 1853.
20000 Mining Co. of Ireland (copper, lead, coal)	7	17	25 0 0	0 5 0	0 5 0	Sept., 1853.
15000 Nantlle Vale (slate), Llanllynn	1	2½	2 2 6	0 1 0	0 1 0	July, 1853.
470 Newtonards Mining Company, Co. Down	50	66	29 0 0	0 2 0	0 2 0	Oct., 1853.
200 North Pool (copper, tin), Pool	22½	235	293 0 0	5 0 0	0 10 0	Oct., 1853.
140 North Roskear (copper), Camborne	10	15½	249 10 0	4 0 0	0 9 0	Sept., 1853.
6000 North Wheal Bassett (copper, tin), Illogan	n.s.	10	8½	2 11 0	0 5 0	Nov., 1853.
6400 Par Consols (copper), St. Blazey	1½	14½	23 6 0	0 10 0	0 10 0	July, 1853.
5000 Peak United (lead), North Derbyshire	7½	15	1 11 0	0 0 0	0 0 0	June, 1853.
1120 Perran St. George (cop., tin), Perranzabuloe	21½	40	1 15 0	0 10 0	0 10 0	June, 1851.
200 Phoenix (tin, copper), Linkinhorne	30	750	240 0 0	10 0 0	10 0 0	Dec., 1852.
1000 Polberro (tin), St. Agnes	15	13	4 5 0	1 0 0	0 10 0	Oct., 1852.
5600 Providence Mine (tin), Ux Lelant	20½	35	20 0 0	0 15 0	0 15 0	May, 1853.
1484 Rhiw III (tin), Tavistock	3½	—	0 8 0	0 4 0	0 4 0	Jan., 1853.
2500 Rorrington (lead), Snailbeach, Shrewsbury	1	—	0 2 2	0 2 2	0 2 2	July, 1852.
250 South Cadron (copper), St. Cleer	2½	500	300 320	4 10 0	4 10 0	Sept., 1853.
9000 South Tamar (silver-lead), Beaferris	11. 6s. 6d.	6½	6 6½	1 0 0	0 5 0	June, 1853.
250 South Tolgas (copper), Redruth, Cornwall	16	130	69 0 0	4 0 0	4 0 0	May, 1853.
250 South Wheal Frances (copper), Illogan	37½	20	230 5 0	2 0 0	2 0 0	Nov., 1853.
1024 Speare Consols (tin), St. Just, Cornwall	1½	9	8 6 0	0 2 0	0 2 0	Sept., 1853.
94 St. Ives Consols (tin), St. Ives	80	125	6 0 0	0 16 0	0 16 0	Oct., 1853.
1000 Stray Park and Camborne Vein (copper)	10½	11	11½	2 0 0	2 0 0	Feb., 1853.
2000 Tamar Consols (silver-lead), Beaferris	4½	2½	4 11 0	0 10 0	0 10 0	June, 1853.
2000 Tincroft (copper, tin), near Pool, Illogan	7	5½	5 6 0	0 10 0	0 10 0	Oct., 1853.
1024 Trehane (silver-lead), Menheniot	1½	9	4 11 3	0 10 0	0 10 0	Oct., 1847.
5000 Treleigh Consols (copper), Redruth	6	2½	1 3 0	0 15 0	0 15 0	May, 1853.
572 Trelyon Consols (tin), St. Ives	6½	27	210 0 0	—	—	—
5600 Tresevian (copper), Gwennap, Cornwall	52½	215	4580 15 0	—	—	—
120 Trevethick (copper), Gwennap, Cornwall	7½	17½	402 10 0	—	—	—
120 Trevisker and Barrier (copper), Gwennap	130	40	297 10 0	2 0 0	2 0 0	Nov., 1853.
160 Trumpet Consols (tin), near Helston	95	145	40 0 0	5 0 0	5 0 0	Sept., 1853.
400 United Mines (copper), Gwennap	40	220	265 215	41 5 0	5 0 0	Oct., 1853.
250 Wellington (copper, tin), Perranzabuloe	8½	4	210 260 270	2 2 5 0	6 0 0	Oct., 1853.
250 West Cadron (copper), Liskeard	29	210	2367 10 0	8 0 0	8 0 0	Oct., 1853.
124 West Providence (tin), St. Erth	5	37½	37 38	20 0 0	2 0 0	Oct., 1853.
1024 West Wheal Treasury (copper)	16. 4s. 10d.	6	3½ 4	0 10 0	0 10 0	May, 1853.
250 Wheal Bassett (copper), Illogan	10½	13	11 14½	5 0 0	—	—
250 Wheal Brewer (copper), Gwennap	4	40	40 0 0	5 0 0	5 0 0	Sept., 1853.
250 Wheal Buller (copper), Redruth	5	150	30 0 0	5 0 0	5 0 0	Sept., 1853.
250 Wheal Clifford (copper), Gwennap	—	—	3 13 8	0 12 6	0 12 6	Oct., 1853.
250 Wheal Exmouth and Adams United	4½	9	7½ 8	0 12 6	0 12 6	Oct., 1850.
1000 Wheal Friendly (tin), St. Agnes	70	20	20 0 0	5 0 0	5 0 0	Oct., 1853.
5000 Wheal Golden (sil.-lead), Perranzabuloe	2½	105	2367 10 0	8 0 0	8 0 0	Oct., 1853.
250 Wheal Jane (silver-lead), Kew	n.s.	17	4 10 0	1 0 0	1 0 0	Oct., 1853.
430 Wheal Lovell (tin), Wadron	33	55	21 10 0	1 10 0	1 10 0	July, 1853.
112 Wheal Margaret (tin), Ux Lelant	7½	120	202 0 0	6 0 0	6 0 0	Nov., 1853.
512 Wheal Mary Ann (lead), Menheniot	5½	45	24 15 0	1 10 0	1 10 0	Sept., 1853.
80 Wheal Owles (tin, St. Just, Cornwall)	70	250	123 3 0	12 10 0	12 10 0	Nov., 1853.
198 Wheal Seton (tin, copper), Camborne	107	250	232 10 0	5 0 0	5 0 0	June, 1853.
520 Wheal Trelawny (silver-lead), Liskeard	8½	41½	39 10 0	1 0 0	1 0 0	April, 1853.
1024 Wheal Tremayne (tin, copper), Gwennap	9½	12	9 15 0	0 10 0	0 10 0	July, 1853.
5000 Wicklow (copper), Wicklow	5	53	21 8 0	1 10 0	1 10 0	Oct., 1853.
9150 Wrysgas (slate), Festiniog	1	1½				